



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

CAPSTONE PROJECT

**DESIGNING COLLABORATION: HOW TO PREPARE
SOF AUGMENTATION TEAMS FOR ASSIGNMENT TO
A U.S. EMBASSY COUNTRY TEAM**

by

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June 2014

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2014	3. REPORT TYPE AND DATES COVERED Master's Capstone Project	
4. TITLE AND SUBTITLE DESIGNING COLLABORATION: HOW TO PREPARE SOF AUGMENTATION TEAMS FOR ASSIGNMENT TO A U.S. EMBASSY COUNTRY TEAM			5. FUNDING NUMBERS	
6. AUTHOR(S) Austin M. Jackson, Joshua A. Pusillo and Steven A. Smith				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number ____N/A____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) This project delivers an immediately implementable and replicable method for improving collaboration in this nation's most complex interagency environment, the United States embassy (USEMB). This method allows multidisciplinary teams to create a self-organizing collaborative system in the country team to address difficult problems within the constraints of exiting manning, authorities, and appropriations. The modular and scalable methodology described in this project allows Special Operations Forces (SOF) teams working in embassies around the world to maximize their operational effectiveness by improving collaboration within the country team. The goal of this project is to move beyond policy debates regarding interagency collaboration and explain how SOF are capable of pioneering a responsive system to improve collaboration within the USEMB country team. Applying a design thinking methodology, we observed country team interactions and other interagency collaborative efforts to develop a concept for SOF augmentation teams to improve collaboration within the USEMB country team. We deliver guidelines and a methodology for SOF augmentation teams to facilitate the development of a collaborative country team capable of solving complex issues.				
14. SUBJECT TERMS Interagency, Collaboration, Design Thinking, Design, Special Operations, SOF, U.S. Embassy, USEMB, Country Team, Problem Solving, Lessons Learned			15. NUMBER OF PAGES 145	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

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MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

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ABSTRACT

This project delivers an immediately implementable and replicable method for improving collaboration in this nation's most complex interagency environment, the United States embassy (USEMB). This method allows multidisciplinary teams to create a self-organizing collaborative system in the country team to address difficult problems within the constraints of existing manning, authorities, and appropriations. The modular and scalable methodology described in this project allows Special Operations Forces (SOF) teams working in embassies around the world to maximize their operational effectiveness by improving collaboration within the country team.

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LIST OF ACRONYMS AND ABBREVIATIONS

AQN	al-Qaeda network
BC	battalion commander
CIA	Central Intelligence Agency
CN	counter-narcotics
CODEL	congressional delegation
COM	Chief of Mission
COP	common operating picture
COS	Chief of Station
CT	counterterrorism
DAO	Defense Attaché Office
DATT	Defense Attaché
DCM	Deputy Chief of Mission
DEA	Drug Enforcement Administration
DEPORD	deployment order
DHS	Department of Homeland Security
DLI	Defense Language Institute
DoA	Department of Agriculture
DoC	Department of Commerce
DOD	Department of Defense
DoS	Department of State
DTAAC	Declared Theaters of Active Armed Conflict
EXORD	Executive Order
FAO	foreign area officer
FBI	Federal Bureau of Investigation
FCS	Foreign Commercial Service
FSI	Foreign Service Institute
FSO	Foreign Service Officer
GCC	geographic combatant commander
HQ	headquarters
ICAF	interagency conflict assessment framework
ICE	Immigration and Customs Enforcement
ICS	Integrated Country Strategy
ICT	information communications technology
ILE	intermediate level education

IMS	interagency management system
INLE	International Narcotics and Law Enforcement
JLLIS	Joint Lessons Learned Information System
JOC	joint operations center
JSOC	Joint Special Operations Command
JSOU	Joint Special Operations University
LEA	law enforcement agencies
LEGAT	Legal Attaché
LNO	liaison officer
MDMP	military decision making process
MLE	Military Liaison Element
MRR	mission resource request
NCO	non-commissioned officer
NCR	national capital region
NGO	non-governmental organization
NSA	National Security Agency
NSWDG	Navy Special Warfare Development Group
OML	order of merit list
OPSEC	operations security
OPTEMPO	operations tempo
OSC	Open Source Center
OSINT	open source information
PAT	PACOM Augmentation Team
PANEX	Operation Panama Express
POC	point of contact
Pol/Mil	political/military section
POV	point of view
PPD-8	Presidential Policy Directive-8
QDR	Quadrennial Defense Review
RAC	resident agents in charge
RSO	regional security officer
SCIF	sensitive compartmented information facility
SDO	Senior Defense Official
SDO/DATT	Senior Defense Official/Defense Attaché
SIS	Senior Intelligence Service

SITREP	situation report
SMA	strategic multilayer assessment
SME	subject matter experts
SNA	social network analysis
SOCPAC	Special Operations Center, Pacific Command
SOF	Special Operations Forces
TSOC	Theater Special Operations Command
UK	United Kingdom
U.S.	United States
USAID	U.S. Agency for International Development
USEMB	U.S. embassy
USG	U.S. Government
USMS	U.S. Marshals
USSOCOM	United States Special Operations Command
VoA	Voice of America
VTC	video teleconference

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ACKNOWLEDGMENTS

Our project would not have been possible without the hard work and dedication of a select few professors, advisers, classmates, peers, and family. Although it would be impossible to acknowledge all of the individuals who helped us along this journey, we would like to thank a few of those individuals personally.

First, we would like to thank our thesis adviser, Dr. Nancy Roberts, for her unwavering dedication to this project and us. Dr. Roberts guided us through the intricacies of the world of design thinking. Your ability to tackle complex and wicked problems through design thinking allowed us to achieve breakthroughs we thought impossible.

We would also like to thank Professor George Lober, who always challenged us in the classroom and with this capstone project. You are a tremendous professor and an honorable professional whom we strive to emulate. We are better people for having worked with you. Thank you for your tireless support and mentorship throughout our time at the Naval Postgraduate School.

Special thanks to the Naval Special Warfare Development Group for funding our travel and for their continued guidance throughout our project. Without their support, we would not have truly been able to apply design innovation.

Without the leadership of Dr. John Arquilla and COL Guy LeMire, this project would not have been possible. Their guidance and direction allowed us to explore myriad opportunities to make us better SOF officers. Additionally, the entire Defense Analysis Department's support for our project has been phenomenal. Your dedication to making this program world class is obvious in every aspect of your instruction. Thank you for providing such relevant instruction and insight through the best curriculum in the world. We would be remiss if we did not thank our amazing classmates who have enriched us through hours of deep discussion on topics germane to our profession. You are the best of our nation.

Thank you to COL(P) Bryan Fenton and AMB Donald Yamamoto for their mentorship and support through this entire process. Your commitment to, and support for, our project is immeasurable.

The SOCPAC J35, LTC Ed Croot, offered us hours of personal time to review our work and offer his personal experience and insight. Wherever we went, the people we talked to specifically mentioned Ed's astounding impact as a PAT team leader. Your support and effort coordinating our embassy observation was instrumental to this project. You are one of the most talented officers in the Army and a future battalion commander of distinction.

A special thank you to our design thinking mentors from IDEO and the Stanford Design School. IDEO partners, David Haygood and Dave Blakely, took their personal time to assist in this project because they believe in making a difference. We appreciate you sacrificing your valuable time for a few military officers. We are better for it. Stanford Design School fellow Anne Gibbon provided hours of coaching and feedback throughout this process, and made countless personal trips to Monterey to assist us with this worthy endeavor.

Last, but most important, we want to thank our amazing families. You have suffered through endless hours of library meetings, typing, editing, reading, and missed commitments. It is to you that we dedicate this project, which we believe will add value to the SOF community and our great Nation. Thank you to Dawn, Wynne, Diana, Emily and Erin for your never-ending support! You mean the world to us.

I. INTRODUCTION

The whole-of-government approach is absolutely crucial to getting after [threats to the U.S. and our partners].... We've got to work together to make sure that those threats don't end up on our shores.

—Admiral William McRaven, 2013

A whole-of-government approach to problem solving requires interagency collaboration. However, realizing a sufficient level of interagency collaboration is a challenge. Miscommunication and cultural misunderstanding can create obstacles to collaboration among agencies. Nevertheless, under certain circumstances, a shared goal can emerge that overcomes these barriers and focuses the efforts of various USG agencies. For instance, following the attacks on September 11, 2001, the al-Qaeda Network (AQN) Executive Order (EXORD) granted extensive authorities to the Department of Defense (DOD) to execute global operations against terror networks associated with al-Qaeda (Malvesti, 2010, p. 3). This charter established Special Operations Forces (SOF) at the core of the interagency counterterrorism arena. However, as perceptions regarding the ability of al-Qaeda to threaten the United States (U.S.) homeland diminished, the debate regarding how the USG should approach national threats recommenced.

U.S. embassy country teams are the interagency organizations at the forefront of U.S. government (USG) policy. It is at the country team that USG agencies and organizations have the greatest opportunity to synchronize policy development and implementation. U.S. Special Operations Command (USSOCOM) remains advantageously positioned to maintain the fight against terrorist groups (Joint Special Operations University, 2011, pp. 45–6). However, SOF cannot succeed in this fight alone. There is a considerable need for guidance regarding how to integrate SOF with other agencies and organizations represented at USEMB to solve the complex problems a country team encounters.

The specific goal of this project is to assist SOF teams in integrating into the complex environment of a USEMB country team. This project offers SOF leaders an immediately implementable, scalable approach to establishing a mutually beneficial culture of collaboration in an interagency environment. It provides three guidelines for SOF leaders seeking to facilitate a collaborative problem solving within the country team: understand the country team and its context, educate and prepare SOF augmentation teams, and introduce design thinking to the country team. We highlight design thinking because we believe it offers an immediately implementable, practical, experiential approach to problem solving in complex situations by capitalizing on the collective expertise, knowledge, and insight of a multidisciplinary network.

The following narrative provides some context regarding the challenges a SOF augmentation team leader faces working as part of a country team.

A. NARRATIVE: SOF ASSIGNMENT TO COUNTRY TEAM

Imagine you recently returned from an operational deployment to discover your command selected you to fill a recently vacated team leader position supporting a counterterrorist mission in the CENTCOM area of responsibility. Knowing the circumstances do not allow a formal handover with the previous team leader, you immediately contact the current assistant team leader for a brief run down on the team's recent operations. The assistant team leader does not seem knowledgeable of the team's mission or the previous team leader's activities. In a seemingly vain attempt, you ask for the team's turnover file. The assistant team leader provides an arbitrary mixture of reports and a convoluted list of interagency and partner nation personalities in the country and region.

You recognize this information is wholly inadequate and seek additional information on the local environment, various regional threats, and friendly forces in the area. Citing other, more pressing requirements, the staff is unable to provide much more information than what you already learned from the Central Intelligence Agency (CIA) World Fact Book. Frustratingly, the other unit members with experience in the country are all deployed, or on leave, and not due back until after your scheduled departure. You

realize you must find your own information. You start your search using the USSOCOM Joint Lessons Learned Information System (JLLIS) database. The data available is sparse, and you have no luck finding contact information for the knowledge manager for that region. You resign yourself to learning about the situation when he gets on the ground.

You arrive in country to find the team dispersed across multiple locations, disorganized, and poorly informed of the situation. Without the previous team leader to conduct formal introductions at the embassy, you decide to head to the embassy and introduce yourself to the country team and other senior officials. The usual dog sniffing contests begins as soon as you enter the chancery. You immediately notice a high level of compartmentalization within the embassy and little obvious connection to the host nation partner force the team is there to advise and assist. As you introduce yourself and listen to your new colleagues, you hear the usual litany of complaints regarding draconian budget cuts and understaffing that seem to be prevalent throughout each of your previous assignments.

The first embassy counterterrorism (CT) synchronization meeting covers an extensive list of foreign fighters and possible connections to the U.S. homeland. Seated by rank and informal cliques, various analysts and interagency representatives fill an uncomfortable room as the lead agency's operations director takes charge. The majority of the attendees say nothing. Those who do, provide very little information pertinent to immediate or emerging threats. The meeting ends and everyone hastily disperses. You attempt to speak with various representatives before they depart to verify their understanding of your mission. You learn that few care, and few of those who do truly understand it. Already frustrated with your first 48 hours of interaction, you email your command in an attempt to clarify your vague "go forth and conquer" mission statement. Clarity comes intermittently through a series of seemingly contradictory emails from various members of the staff.

Eventually, you get the opportunity to discuss your mission with both the Chief of Mission (COM) and Chief of Station (COS) in a closed-door meeting. Tempted to produce a slideshow, you instead choose to commit your talking points to memory.

Before approaching the Ambassador, you meet with the COS and Federal Bureau of Investigation's (FBI) in-country representative because it is the Ambassador's policy. You recognize your mission indirectly affects and benefits them both, and everyone agrees to support each other's mission.

When you brief the COM, you notice cues that the Ambassador is hesitant to support your mission. You learn an ongoing U.S. Agency for International Development (USAID) project is occurring in the area you are seeking to expand your advisory and assistance mission. The USAID representative expresses concern that increased U.S. military presence in the area will trigger an uprising. You seek support from the COS, but quickly realize he experiences similar concerns often and is electing to back down. Dejected, you collect your notes and head back to your tiny embassy space (really just a glorified closet) to call your headquarters on the secure line before typing up your formal situation report (SITREP). You update your command on your progress only to have your boss berate you for your "lack of salesmanship." Frustrated, you hang up the phone and ask yourself "What do I do now?" You head back to your team house to consider your next move.

B. THE CONTEXT: SOF AND THE COUNTRY TEAM

As the United States reduces the presence of military forces in declared theaters of active armed conflict (DTAAC), SOF will continue to counter threats to U.S. national interests around the globe. Countering national and regional threats originating from places, such as Yemen, the Republic of the Philippines, the Trans-Sahel and the Horn of Africa, will require an approach different from those developed and utilized by the United States to address the unique challenges of designated combat zones. SOF leaders must accept and adapt to this changing state of affairs by building upon existing knowledge, skills, and competencies to support the USEMB teams already living and operating in these varied and contentious environments.

SOF do not possess the manning, authorities, or appropriations to cope unilaterally with the complexity of many emergent challenges unilaterally. As the complexity of the problems increases, the ability of SOF leaders to collaborate with the

other elements of the USG will grow in importance. Admiral McRaven (2012) addresses this paradigm shift in his USSOCOM 2020 Strategy. He emphasizes, “[The SOCOM] vision is a globally networked force of Special Operations Forces, interagency, Allies and Partners able to rapidly and persistently address regional contingencies and threats to stability” (p. 2). A practical impetus for this shift does exist. SOF cannot expect the support of large, co-located joint operations centers (JOC), such as those frequently seen in the DTAAC. Outside the DTAAC, the USEMB country team supersedes the JOC as the front line command post.

Richard Lugar, former chairman of the Senate Foreign Relations Committee stresses, “There is no country in the world where our Nation can afford to send diplomats and servicemen ill-prepared to understand and make the tough choices” (U.S. Senate Committee on Foreign Relations, 2006, p. v). Embassies are on the frontline for executing U.S. interests, which demands the best from its Ambassadors, Foreign Service officers, and all the individuals assigned from within the interagency. Due to the influx of interagency and DOD personnel into USEMBs worldwide, a growing need exists to ensure they are all working together to contribute to the U.S.’s foreign policy goals in each respective country (p. 1). Thus, the question becomes, how is the country team at each USEMB collaborating to work towards the U.S.’s policy goals? Most importantly, how might SOF facilitate collaboration within the country team?

C. THE CHALLENGE: TRANSITIONING THE COUNTRY TEAM FROM COORDINATION TO COLLABORATION

A country team may appear as a microcosm of the larger interagency community, but is actually an organization with an established hierarchy putting the ambassador in charge of all of the various interagency organization representatives within the country team. A complex issue develops when individuals from a host of organizations, familiar with the bureaucratic world of interagency coordination within the national capital region (NCR), find themselves a member of the USEMB country team with its own unique authority structure. This issue defines the challenge of this project. Working as a member of the country team requires a mental shift from coordination to collaboration for the individuals assigned to work at an USEMB.

Coordination, to begin with, describes the concept or mechanism for interaction between organizations. De Coning (2002) defines coordination as a “system of interaction, involving exchange of information, negotiation, de-confliction, mutual support, and planning at all levels between organizations to achieve respective objectives.” DOD Joint Publication 3–0 defines interagency coordination as “the coordination that occurs between elements of the Department of Defense and engaged U.S. agencies and departments for the purpose of achieving an objective” (Department of Defense, 2012, p. GL–10). This complex process allows the USG to combine and analyze multiple facets of a particular national issue to provide decision makers with the best-informed interagency assessment.

Collaboration is the process of two or more entities working together to accomplish a shared objective. Roberts and Bradley (1991) define collaboration as “a temporal social arrangement in which two or more social actors work together toward a singular common end requiring the transmutation of materials, ideas and/or social relations to achieve that end” (p. 212). In a similar view, Straus (2002) defines collaborative problem solving as “the process people employ when working together in a group, organization, or community to plan, create, solve problems and make decisions” (p. 18). Within the country team, collaboration means individuals from various interagency organizations join forces to share information, integrate efforts, and pool resources to provide solutions and options for the ambassador.

Collaboration cannot occur in isolation. It requires two or more actors connected in some way. The type and extent of connections between actors is a prerequisite for the emergence of collaboration. However, complex systems of internal and external influences affect collaboration differently. Not all relationships support collaboration to the same extent. Some can result in indiscriminate relational connections that may inhibit group collaboration if the broker restricts the flow of resources and information. Ultimately, the collaborative capacity of a group of people emerges from the strength and number of relational ties. Their collaborative capacity, also known as social capital, is a function of the relational ties that bind the network together. As Cohen and Prusak (2001) explain, social capital is “the stock of active connections among people; the trust, mutual

understanding and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible” (p. 4).

The existing country team structure offers numerous opportunities for individuals and agencies to communicate and coordinate with each other. Many might assume that these efforts are truly collaborative. However, country team collaboration requires more than just communication and coordination. Collaboration within the country team requires its various members to work together towards common objectives and end-states, all which revolve round providing options for the ambassador’s diplomatic mission and objectives.

The fundamental issue is not one of legislated authorities. The challenge is how to improve trust and understanding between agencies within the country team using existing structures to strengthen relationships. Admiral McRaven (2012) succinctly states in *USSOCOM 2020: Forging the Tip of the Spear*, “Success in the future demands unprecedented levels of trust, confidence and understanding—conditions that cannot be surged” (p. 3). If the country team is the platform in which gaining and leveraging this trust is to occur, then a great deal of focus is necessary to prepare individuals to work in this environment. This begins by developing a better understanding of the challenges and approaches to collaboration.

How a USEMB country team collaborates is a largely undefinable process. If individuals treat the country team like a microcosm of the broader interagency community, they will never fully embrace the collaborative spirit required within a country team because their allegiance will remain to their parent organization. Country team members must accept their role as part of an organization, willing to put the country team’s objectives ahead of their own agencies, which is difficult if the country team lacks an established identity. Although interagency professionals will agree that effective methods of problem solving require the collaboration of various agencies, they admit that dealing with other agencies is challenging.

Every country team is unique and may structure itself differently. Although these interagency environments continually change, and organizational cultures evolve as

personalities come and go, one constant remains, the need to transition from the NCR interagency network of independent autonomous agencies to the country team organization. To the extent that budgets shrink and personnel systems constrain talent to specific organizations, the way in which country teams work together on complex issues will become increasingly essential to future success. Therefore, we address an important question: how can SOF help the country team transition in this complex and dynamic environment that requires collaboration as a key component in its problem-solving process?

D. BARRIERS TO COUNTRY TEAM COLLABORATION

In *A Diagnostic Approach to Building Collaborative Capacity in an Interagency Context*, Thomas, Hovevar, and Jansen (2006) present a systems model of inter-organizational collaborative capacity. Using this model, they identify several barriers and enablers to organizational collaboration. The five barriers to collaboration are (1) divergent purpose and strategy—conflicting goals and lack of shared purpose inhibit effective collaboration, (2) structural—specific prohibitions, or cultural norms, against information sharing undermine collaboration, (3) lateral mechanisms—a lack of familiarity with other organizations promotes distrust and enmity that inhibits communication, (4) incentives—organizational territoriality and competition for scarce resources incentivize individuals not to collaborate, (5) people—individual perceptions can lead to arrogance, disrespect and outright hostility between individuals of various organizations (p. 8). Any approach to interagency problem solving must overcome barriers to collaboration and identify opportunities for various agencies to complement the efforts of others.

The country team problem-solving and decision-making process is an interrelated system of constraints and opportunities influenced by numerous stakeholders. The issues and challenges that the country team faces—possibly to include disaster response, host nation security or election reforms, or pursuit of U.S. national interests—benefit from a unified government approach. No single organization has all the answers to these types of problems. Similar to the checks and balances involved in USG creation of law, the

interagency acts as a system of checks and balances to itself to ensure all interests and concerns for a given issue are considered. For the country team to function, decision makers and agency stakeholders must have a sufficient level of individual credibility and trust in other members.

However, eight challenges impede collaboration among the agencies that comprise the country team.

1. Stovepiping

Stovepiping is a common phenomenon in centralized bureaucratic institutions due to the restricted flow of information from the bottom to the top of the hierarchy. The consequence is that only the top of the hierarchy can integrate information passed only through vertical channels. The intelligence community is often accused of stovepiping because of the strict handling of the various types of collection, which keeps it in “stove-piped” channels. Even after the 9/11 Commission report, which lambasted both law enforcement and intelligence agencies for not sharing information regarding the growth, radical plans, and infiltration of extremist Al Qaeda cells into the United States, information is still retained internally to organizations and often only shared informally between analysts (Lamb & Marks, 2009, p. 10).

For the country team, stovepiping can be extremely damaging to its effectiveness. Integrated efforts become devalued because representatives within the country team may be tempted to hold onto and treat certain types of information as special to their parent organization and keep it “stove piped” internally through that organization’s own channels. Although the ambassador has hierarchical authority over the country team, he might not see all communications of the country team with other organizations and agencies. For example, the DOD and FBI, when submitting reports to their headquarters, use unique, classified IT systems that Department of State (DoS) systems cannot access. The underlying effect at a typical country team meeting might be an incomplete presentation of information or a half-hearted attempt by the presenting organization to share information. When the country team does not share information, collaboration is very difficult.

2. Lack of Cultural Understanding

Organizations often spend a great deal of effort to prepare personnel to master their assigned specialty within their parent organization, but do not emphasize preparing these same personnel for their role within a country team. For instance, various units within USSOCOM assess, select and train personnel to influence many types of people to accomplish the mission. Despite this selection process, and training, some SOF personnel are more capable developing and maintaining interagency and country team partnerships. However, even talented operators are ineffective without sufficient cultural understanding.

SOF cannot effectively integrate into country team problem solving efforts if we fail to understand other organizational cultures. Understanding the values and backgrounds of other organizations allows SOF to build on common goals and identify areas to improve interagency problem solving and decision making. Most importantly, cultural sensitivity will lead to improved creativity within the embassy. The DOD has a reputation for boasting an “everyone should be like me” mentality. SOF personnel must address this concept with their colleagues by demonstrating genuine empathy and an ability to listen and collaborate.

Although the DOD and the DoS have different charters, they both support overarching national policy objectives with the intent of secure this nation’s strategic position. In the seminal classic, *Defense is from Mars, State is from Venus*, Army Colonel Rickey Rife (1998) states, “Once we understand the differences in our two agencies (DOD and DoS) we are well on the way to using them to our advantage —capitalizing on our respective strengths and special skills” (p. 2). As he suggests, successful interagency collaboration requires that SOF leaders understand cultural differences and turn them into positive attributes. The DoS mission is to keep this nation from going to war through diplomacy, while the DOD’s mandate is to fight and win this nation’s wars. If SOF fails to understand the role of the DoS, then it is unlikely effective collaboration will occur. He stresses, “the various members of the Country Team bring to the mission their own respective organizational cultures, procedures, expectations, situational awareness and levels of expertise. This again has a strong tendency toward ‘stove piping’ of the effort,

with individual Country Team members frequently remaining within their comfort zones by exchanging information with and responding to direction from their leadership back in the U.S.” (p. 2-1).

3. Competition

Competing interests often exist between organizations. Loyalties to the organizations or self-interests supersede any other common purpose unless that common purpose is severe (e.g., an embassy attack). Budget cuts and resourcing shortfalls typically play into an organization’s ability to contribute to a common purpose. Yet, while a logical call for a network amidst the interagency does occur, within the USG, each agency is beholden to the finite limited purse of the Congressional Budget Office. Since the USG budget process has yet to adapt to this interagency collaborative network, each agency must continue to fight for its piece of the budget pie, again leading to competition within a resource (money) constrained environment. These shortfalls are not always negative as they may cause organizations to pool resources together. More often than not, however, these restraints cause tension and competition. Organizations may also perceive friction stemming from the manner in which executive and legislative channels grant authorities. The DOD’s broad authorities to execute operations in support of national security are often perceived as encroaching upon, or in direct competition with, the authorities granted to other organizations. Whether this is due to a lack of education or experiences, competitive misperceptions affect country team interaction, trust, and information sharing. Once participants within the country team recognize that they are in competition or conflict, it becomes much harder to collaborate.

4. Lack of Communication

Communications techniques culturally acceptable within one agency can cause significant consternation within other agencies. Representatives of some agencies prefer to present and receive information in the form of a typed memorandum or to host a meeting with handwritten notes. Often, the country team will host meetings with no formal agenda or briefing slides. DOD leaders, on the other hand, often use PowerPoint slides to represent all forms of data. Any attempts to change cultural norms makes some

military leaders appear overbearing and can lead directly to friction among agency members.

Unfortunately, too frequently, DOD leaders attempt to communicate with interagency partners in a directive manner befitting a superior speaking to a subordinate rather than as peers. DoS Foreign Service officers and other career government civilians neither welcome nor accept this style of interaction. Furthermore, the flippant use of DOD jargon in an interagency setting can be the difference in the success or failure of strategic DOD objectives. These seemingly inconsequential cultural differences make SOF leaders often appear overbearing to their interagency counterparts.

5. Individual and Organizational Conceptual Blocks

In *Conceptual Blockbusting*, Adams (2001) explains that numerous conceptual blocks influence the problem-solving process. Adams explains that a failure to recognize the influence of conceptual blocks frequently prevents the problem solver from accurately perceiving a problem or determining an appropriate solution (p. 13). Personal biases, cognitive limitations, cultural norms, and group dynamics interact to influence how problem solvers approach problems of all types. In particular, these conceptual blocks impede the discovery of innovative methods and approaches for coping with wicked problems, such as the vicious cycle the interagency endures when trying to collaborate on culturally divisive and competitive issues (see Figure 1). Each organization (labeled O1, O2, O3, and O4) intersects with only part of the problem, and the organizations lack any kind of a collaborative relationship. Biases naturally occur when an organization only sees one angle or position of the problem. In spite of these biases, the rationale for organizations to collaborate is to solve problems not constrained by the boundaries of one organization. Since the problem is bigger than any organization, collaborating with other organizations is necessary if progress is to be made in effectively managing the problem. If the problem represented in Figure 1 is terrorism, then the organizations (O1–4) could easily represent the FBI, the CIA, the Department of Homeland Security (DHS), and the National Security Administration (NSA) (Raab & Milward, 2003, p. 414).

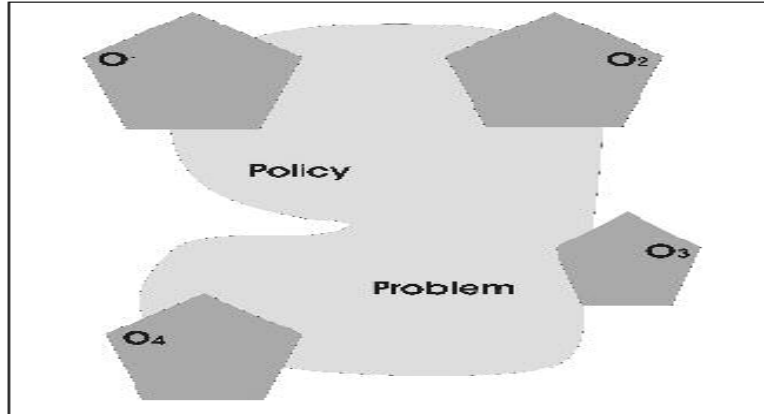


Figure 1. Rationale for collaboration (from Milward & Provan, 2006, p. 9)

Numerous conceptual blocks directly affect interagency problem solving and decision making. Improving the interagency problem-solving process requires addressing conceptual blocks, which Adams (2001) says are “imposed by our immediate social and physical environment” (p. 71). For example, embassy workspaces are often hectic. Problem solving is difficult when phone calls, urgent email and unexpected visitors interrupt. There are numerous ways to mitigate these distractions so colleagues can discuss a particular problem with minimal interruption. One approach is to leave the disruptive environment. This can be as simple as taking colleagues out for coffee or hosting a working luncheon at a restaurant outside of the embassy. This allows the colleagues to discuss a particular problem with less distraction, but also build a more personal relationship with each other.

6. Lack of Defined Purpose and Performance Metrics

The country team’s mission may be tough to define and fully understand due to politics and nuance of diplomacy. Add to it the demands of the individual organizations that comprise the country team, and its purpose becomes more complex and dynamic. Under these circumstances, it is not surprising that individuals within the country team might have difficulties understanding the purpose of the country team. Moreover, country team members have strong tendencies to delimit the problem territory poorly and characterize problems within the confines of prevailing perceptions of roles and responsibilities. Habits developed through training and specialization strongly influence

how one perceives purpose and frames the problem set, which can lead to false or unnecessary limitations (Adams, 2001, p. 120). Without an agreement on purpose, determining a common metric of success is problematic for any country team. While the metrics for success are most apparent when a crisis is at hand, they are less so, when faced with ambiguous challenges, i.e., economic stability or security cooperation, especially when U.S. national interests are not immediately at stake. In these matters, collaboration is critical to define a collective end-state and measure its results, especially they are not readily apparent.

7. Systemic Inflexibility

Another challenge facing the country team is its inability to adapt to the rising networked modes of coordination among new security threats from both state and non-state actors across the globe (Raab & Milward, 2003, p. 4). The dark networks¹ that define contemporary security threats, such as transnational terrorism, global crime, and weapons proliferation, are not only able to coordinate the resources and actions of globally linked criminal actors, but are particularly suited for evading national security efforts traditionally focused on superpower conflicts and relations (Krahman, 2005, p. 19). To respond effectively to these security challenges and dark networks, the national and international security providers, i.e., U.S. interagency and country teams must employ adaptable networks. This shift towards networked modes of collaboration has forced the restructuring of government agencies to form formal and informal links like the U.S. militaries' "network-centric warfare," which uses information technology to link multiple military units and agencies with increasing speed and synchronization (Krahman, 2005, p. 20). To operate in the networked world, the USEMB country should be an example of a collaborative network, one that works as a whole to advance USEMB goals and objectives. Unfortunately, country teams are often not flexible enough to adapt to the dynamic problems and environment they face. The challenge is getting individual agencies, steeped in static bureaucratically oriented processes, to adapt and communicate in such a fluid network.

¹ Dark networks are hidden (i.e., covert or clandestine) networks (Everton, 2012, p. 399).

8. Lack of Trust

Each of the challenges previously listed, when unchecked, leads to an overall lack of trust and hurts any attempt at collaboration with the country team. Figure 1 shows how organizations intersect only part of a given problem and are subject to the constraints of a given policy/budget, begging the questions, how are agencies able to trust in such a constrained and competitive environment? And if agencies cannot trust one another, how can the individuals of a country team learn to trust given that they represent and must maintain some loyalty to their parent organization?

Other institutional issues also contribute to mistrust. A new SOF officer coming into a country may have difficulty trying to establish buy-in from the country team on a given mission tasking. The rate of personnel turnover may have a profound impact on how he does his job. Other organizations that stay in country for long periods know that they can “wait out the new guy,” and withhold information, or simply ignore the officer’s existence due to a perceived lack of experience, which could lead to further distrust. The level of trust will ultimately undermine the collective approach to problem solving.

E. IMPROVING COUNTRY TEAM COLLABORATION WITH DESIGN THINKING

Ryan (2012) examines contemporary approaches to interagency collaboration and problem solving to identify ways to improve interagency interaction (i.e., scenario-based planning, the interagency conflict assessment framework (ICAF), the strategic multilayer assessment (SMA) and the interagency management system (IMS) (p. 23). He concludes that a failure to address steady state planning exists amongst agencies that forces individual organizations to rely on incongruent operational planning techniques. Furthermore, Ryan (2012) assesses that crisis-centric or reactive planning approaches unrealistically assume that participants can rationally overcome various organizational and cultural contexts to obtain consensus regarding the nature of the problem before collectively arriving at an acceptable solution (p. 25). Thus, his goal is to develop a new framework to overcome the challenges of interagency collaboration, one that is “inclusive of diverse perspectives, integrative of the contributions of individual agencies, flexible to

the scale and range of interagency challenges, [and] robust against power dynamics” (p. 23). With these inclusive, integrative and flexible criteria in mind, Ryan calls for interagency leaders to develop and adopt a new approach to steady state interagency coordination.

Ryan (2012) reasons that the traditional cross-cultural nature of design “can enable innovative strategy development and organizational learning” (p. 28). He enumerates five characteristics of design that make it uniquely suitable for interagency collaboration. (1) Design is “meta-perspective” (p. 27), which allows design to transcend disparate organizational perspectives and experiences to analyze the system in which the problem resides. (2) Design emphasizes “egalitarian discourse” (p. 27). According to Ryan (2012), “Designs discursive structure facilitates holistic understanding, in contrast to traditional, rational, decision-making approaches that decompose problems into functional areas” (p. 27). Design trades the perceived efficiency of a highly structured problem-solving approach for a discourse intended to foster a holistic understanding of the problem to avoid negative distal effects. (3) Design is “robust to power differences among team members.” (p. 27). The general process of design prevents unquestioned frames of reference by challenging existing assumptions, definitions, and boundaries for inquiry (p. 28) that can reduce the formation of coalitions counterproductive to creative thinking (p. 21). (4) Design is “loosely structured and iterative” (p. 28). The lack of rigid checklists or products keeps the process flexible and scalable to remain within time and resource constraints (p. 28). (5) Design “does not rely on military-specific concepts” (p. 28), which reduces animosity inherent with a military dominated planning methodology and improves the acceptance of the process by other agencies.

Ryan (2012) is a clear advocate of a design approach to interagency collaboration. His research indicates that a design approach to complex situations can facilitate consensus when various individual incentives and biases threaten to undermine the decision-making process (p. 28). Ryan’s broad assessment of contemporary efforts to promote organizational collaboration leads to his conclusion that designing is a useful tool that complements traditional methods of interagency activity.

Roberts (2011) also advances design thinking for collaborative problem solving, especially as the number of stakeholders and complexity of problems increase (p. 53). She describes the design thinking approach as a, “collaborative problem solving process that invites people who ‘live’ with the problem to frame it, establishes the parameters and constraints of the solution search, identifies creative ideas as solutions, rapidly prototypes and tests solutions in the field, collects feedback and reframes problems and solutions wherever the data-driven process (not ideology) leads” (p. 21).

The authors concur. Throughout their engagement over the past 12 months with various Stanford d.School fellows, and two of the IDEO design consulting firm partners (David Blakely and Dave Haygood), they discovered that design thinking provides a neutral and intuitive process that promotes collaboration to address complex problems effectively. SOF augmentation teams, trained and experienced in facilitating the design thinking process, can immediately improve interagency collaboration within the existing manning, appropriations, and authorities of a USEMB country team.

F. CAPSTONE STRUCTURE

The following chapters outline the design thinking approach to problem solving. Chapter II conducts a literature review of the design thinking process, which breaks down the phases and roles of personnel using design thinking. This chapter also discusses the genesis of design thinking and how the Stanford Design School and the innovation consultancy IDEO revolutionized the business world.

Chapter III details our use of the design thinking process address the challenge of this project. This chapter also describes how we used the discover, ideation and prototype phases to complete this capstone project. It also provides context for using design thinking with military application. The chapter ends with useful details for properly implementing design thinking as part of a SOF augmentation team operating in an embassy.

Chapter IV describes the country team and the embassy environment. It assists SOF leaders in understanding how they fit into the overall embassy construct.

Chapter V explores the nuances of introducing design thinking to the other interagency members of the country team. It highlights the importance of capitalizing on the right opportunities to add value to the COM's mission objectives.

Chapter VI examines how to prepare SOF augmentation teams prior to deploying to such a complex and dynamic environment as an USEMB. This nation's SOF leaders have been adept at preparing for combat for the past 12 years, but the embassy environment provides new challenges for which SOF leaders must prepare.

Finally, Chapter VII concludes the project, distills lessons learned and provides recommendations for further study on the use of design thinking by SOF to cope with complex problems.

II. DESIGN THINKING

Design thinking is a holistic, optimistic, and inclusive human-centered approach to collaborative problem solving. Popularized by product designers and architects, design thinking evolved from an industrial process to create innovative products to a process that addresses challenging social issues in highly complex and ill-defined environments. Design thinking integrates multidisciplinary teams to discover inspiration from prospective users and relies on prototypes (i.e., tangible representations of a product or process) for users to test prior to implementation. It is a powerful methodological approach suitable for immediate implementation by those who seek to overcome environmental resistance to collaboration within country teams.

Although design thinking is a highly useful approach to coping with dynamic and wicked problems in the interagency or country team environment, it is not a suitable approach to all problems. It augments, rather than replaces, current problem-solving approaches. Time sensitive and stressful situations (e.g., crisis response) require other methods of problem solving (e.g., military decision making process—MDMP). Design thinking is a process to cope with complex human problems, such as multidisciplinary network problem solving and inter-organizational collaboration. It provides stakeholders with a neutral space to develop a shared understanding of the problem, as well as desirable, feasible and viable approaches to resolution.

This chapter describes the design thinking process as one practical approach to collaborative problem solving. It is not a manifesto on design.² We begin with a discussion of the purpose and characteristics of three interrelated processes (discover, ideate and prototype) that comprise the iterative design thinking process. A description of the critical roles (initiator, sponsor, convener, design team and stakeholders) and elements (the design brief, the design team and the design space) necessary for the design thinking process follows.

² For a detailed treatise on the theory of design, consult *The Design Way* by Nelson and Stolterman.

A. THE DESIGN THINKING APPROACH

[Design thinking] is an approach to innovation that is powerful, effective and broadly accessible ... [that] teams can use to generate breakthrough ideas. (Brown, 2009, p. 3)

The design thinking approach can appear as unstructured chaos to individuals comfortable with linear, reductionist problem solving. Brown (2009) explains that this viewpoint “is not because design thinkers are disorganized or undisciplined but that design thinking is fundamentally an exploratory process” (p. 17). Brown (2008) explains that the design thinking process is a “system of spaces rather than a predefined series of orderly steps” (p. 4). His explanation emphasizes that design thinkers are free to move through the design thinking process as necessary rather than bound to move linearly from step to step.

In common usage, design is not always interchangeable with design thinking. The Design Council (2013), the advisory organization on design to the United Kingdom (UK) government, defines design as “an activity that translates an idea into a blueprint for something useful, whether it’s a car, a building, a graphic, a service or a process.” Design thinking, in contrast, is more a mindset. Krieger (2010) explains design thinking as “an approach to solving... problems by understanding users’ needs and developing insights to solve those needs” (p. 7). More than a discrete blueprint for problem solving, design thinking represents a worldview, individual mentality and method of establishing a collaborative and creative culture.

Influential design thinking advocates use different terms to describe the iterative aspect of design thinking. IDEO describes design thinking a cyclical process of inspiration, ideation and implementation. The Stanford Hasso Plattner Institute of Design (d.school) designates design thinking as a system of five connected phases: empathize, define, ideate, prototype and test (d.school, 2013, p. 1). Acumen (2013) outlines the design thinking process as an iterative transition between discovery, ideation and prototyping. Regardless of the terminology used to identify the various spaces or modes of design thinking, it is an iterative, cyclical process. The design team occupies the interrelated spaces of the design thinking process as necessary.

This project combines these analogous perspectives and codifies the design thinking process as three interrelated core phases: discovery, ideation and prototyping (see Figure 2).³

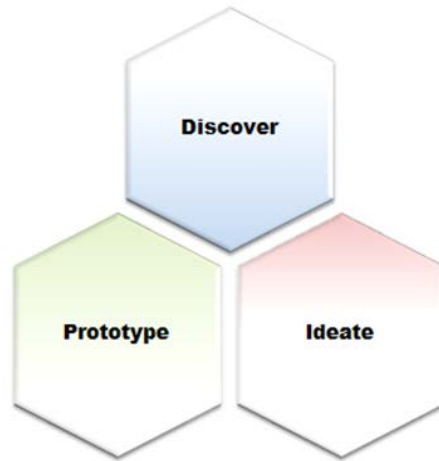


Figure 2. The design thinking approach

1. Discover

It ain't so much the things we don't know that gets us into trouble. It's the things we know that just ain't so.

—Josh Billings (Keyes, 2006, p. 3)

Discovery within the design thinking process melds traditional research techniques with qualitative assessments to develop empathy and define the problem. It is an active and participatory process of learning about a problem and its contextual environment. Essential in determining constraints and challenging assumptions (Brown, 2009, p. 237), discovery involves a deliberate effort to overcome the numerous conceptual blocks that may hinder the problem solver's ability to understand a problem within its context.

Thus, the purpose of the discovery phase is to obtain information relevant to the problem territory, develop deeper empathy with stakeholders, and delimit the problem

³ Although presented as a linear sequence, design thinking is non-linear in execution.

space (d.school, 2013, p. 2). It is an important method of deriving inspiration from sources outside a particular organization or group. Within the discovery phase, design thinkers empathize with stakeholders and users to define the problem territory. The goal is to unmask latent needs, which the user may be unaware, and share insights among the design team (Thoring & Müller, 2011, p, 38). To achieve this end, discovery is a continual process of observation, insight and empathy.

a. Observation

Disassociated numerical data cannot replace the value of personal experience in the contextual environment of the problem territory. A critical component of determining how individuals behave in particular context is the observation of prospective users, which involves more than directly asking people about their wants and needs (Kelley & Kelley, 2013, p. 90). Surveys alone are insufficient at informing the design thinking process. Surveys are great tools for validation, but true insight requires fieldwork (D. Haygood, personal communication, November 26, 2013). How people say they act and their actual behavior often differ. Anthropological tools and contextual observations allow for a better understanding of the problem territory than quantitative analysis of measured data. For this reason, experiential learning is the heart of the discovery phase (d.school, 2013, p. 2). Observing the ways people adapt to their environment often leads to the identification of existing, successful workarounds. Watching people interacting with a product or within a social system provides understanding of what they truly value. Thus, knowledge of human behavior and individual experience in a particular environment provides insight into what the design thinking team must address in prototypes (Davis & Tedesco, 2013).

Ultimately, effective observation requires suspension of judgment. Kelley and Kelley (2013) recognize this suspension is particularly difficult for individuals who consider themselves experts in a particular field. However, they stress the importance of setting aside preconceived notions to see what is true (p. 90) to allow the design team to determine what users and stakeholders actually value within a system. Observation leads to insights that inform the rest of the design thinking process.

b. Insight

Insight is the process of synthesizing observation and experience. It is the creative act of identifying meaning from raw information (Brown, 2009, p. 70). Insight often requires repeatedly asking the question “why” to determine the root causes of systemic challenges. Asking a minimum of five “why” questions is an approach to the deep analysis of causal relationships (Andersen & Fagerhaug, 2006, p. 17). Asking “why” challenges prevailing assumptions and improves comprehension of the problem territory.

The visualization of complex systems or large amounts of observed data is an important source of insight. Visual analytical tools reduce the cognitive work necessary to process and analyze large amounts of data to gain insight through perception and interaction (Keim, Mansmann, Schneidewind, & Ziegler, 2006). Visualization can facilitate insight by organizing and grouping information to facilitate the examination and structuring of the information the design team gathered. It allows the design team to understand observations within a larger context. Furthermore, visualization can assist in illuminating gaps in knowledge and the need for additional observational data.

Many analytical techniques are useful for deriving insights from observational data. One technique particularly valuable in deriving insight from the information gathered during the discovery phase is social network analysis (SNA). SNA plays a crucial role in defining human-centered problems influenced by the structural factors of a system or network. It emphasizes the importance of understanding the relational interactions between actors (Freeman, 2004, p. 16) and provides empirical content regarding its social context (Everton, 2012, p. 7). Most importantly, it can pinpoint how relevant actors can adapt to their environment by changing the nature of their ties and relationships.

c. Empathy

Any successful solution to a social problem is born from empathic understanding. The ability of the design team to understand a problem from the perspective of a user can only come from observation, engagement and immersion (d.school, 2013, p. 1). Krieger (2010) stresses that “only through contact, observation and empathy with end-users can

you hope to design solutions that fit into their environment” (p. 9). Empathy is the conceptual foundation of the design thinking process.

Empathy is a contested term. Numerous definitions appear in the literature. In the context of design thinking, empathy is the ability to see the world from another person’s perspective. Its intent is to understand the interrelated motivations, core beliefs and contextual factors that influence behavior (Kelley & Kelley, 2013, p. 20). It is not unquestioned agreement or trite platitudes mindlessly offered to another individual so that they view people, or their organization, in a positive light. Empathy is a form of awareness born from a deep understanding of individual needs and environmental context.

Design thinking’s emphasis on holistic observation to develop empathy opens up ideas for desirable innovation. It allows the design team to identify stakeholder values and preferences. Ultimately, the understanding that comes from ethnographic observation, contextual insight, and user empathy informs the ideation process.

2. Ideate

Defer judgment.
wild ideas.
topic.

Encourage
Stay focused on the
Build on the ideas of others.

—Sign in IDEO design space

Ideation is the translation of insights into ideas (Brown, 2009, p. 64). It is the process of generating and developing ideas to prototype (p. 16). Ideas materialize from the insights obtained during the discovery phase coupled with the knowledge and experience of the design team. The goal of ideation is to generate as many distinguishable ideas as possible. The greater the number of ideas produced, the greater the probability that at least one innovative idea will surface.

Divergent thinking produces the largest number of unique ideas and critical to ideation. The degree to which a design team is interdisciplinary correlates to the group’s ability to generate an array of different ideas during brainstorming. The design thinking

facilitator plays a crucial role in encouraging divergent thinking and helping the design team build on the ideas of one another.

Group brainstorming sessions can generate large numbers of ideas. Group brainstorming provides a structure for sharing ideas (Brown, 2009, p. 86). In addition to generating ideas, properly facilitated group brainstorming sessions produce five positive outcomes for organizations: (1) improve organizational memory, (2) develop participant skills, (3) evaluate knowledge by challenging assumptions, (4) reward technical skill with status and (5) impress observers (Sutton & Hargadon, 1996, p. 685). Brainstorming also reinforces behaviors and practices associated with a culture of creativity that produces organizational benefits outside the confines of formal brainstorming sessions (Sutton & Hargadon, 1996, p. 715).

Visualization also helps translate abstract notions into tangible ideas and communicate vague concepts to a diverse group. It is a valuable method of avoiding the semantic confusion that can emerge from the use of acronyms, jargon, slang, and colloquialisms among a diverse set of stakeholders. Dry erase whiteboards and Post-it notes are valuable tools for visualizing ideas in a manner that invites feedback and potentially lead to new ideas or improved understanding. Post-it notes also facilitate the rearrangement and clustering of ideas to reveal prevailing themes and insights.

At the culmination of the ideation phase, the design team synthesizes information to select an idea for prototyping. While divergent thinking is imperative in generating new ideas, convergent thinking is important to the transition from ideation to prototyping. Convergent thinking is necessary when a group selects among existing options (Brown, 2009, p. 67). Limited material resources and time require design teams to select only a few of the ideas generated for prototyping.

3. Prototype

Fail early to succeed sooner.

—IDEO motto (Brown, 2009, p. 17)

Prototyping is the phase of the design thinking process that moves concepts that emerged during the ideation phase into reality through exploration, testing and refinement (d.school, 2013, p. 4). A prototype translates a promising conceptual idea into something tangible others can evaluate and test. Prototypes bridge the gap between the abstract and the practical. Useful prototypes range from physical products to dramatizations of a process. The essential quality of a useful prototype is that users can interact with it and provide feedback. According to Brown (2009), “by taking time to prototype our ideas, we avoid costly mistakes such as becoming too complex too early and sticking with a weak idea for too long” (p. 105). Frequent prototyping prevents the design team from overinvesting in an unsuitable course of action.

The purpose of prototyping is twofold. First, prototyping tests assumptions and validates solutions. Every prototype represents progress (Brown, 2009, p. 65). Prototyping early and often provides crucial feedback and encourages further innovation. Second, prototyping provides the design team with an important opportunity for experiential learning that supports subsequent iterations of the design cycle. Prototyping then informs discovery and ideation during subsequent iterations of the design thinking process. Bill Burnett refers to prototyping as a way of building your way to a solution. He describes prototyping as the process of making in order to think (Stanford Center for Professional Development, 2011). Effective prototypes provide answers to specific questions and validate ideas (Acumen, 2013). The results from prototyping can improve empathy with prospective stakeholders, improve the definition of the problem, and provide experiential knowledge that can lead to new ideas.

Prototyping is a necessary phase of the design thinking process because all potential solutions have associated costs. Rapid and frequent prototyping assists in identifying the potential costs of an idea early in the design thinking process. Brown

(2009) recommends that prototypes “command only as much time, effort and investment as is necessary to generate useful feedback and drive an idea forward.” (p. 91) Perfection is the enemy of a good prototype. Frequent prototyping allows the design team to evaluate ideas without large initial investments of time or money (d.school, 2013, p. 4). Krieger is also a staunch advocate of early and rapid prototyping to obtain valuable feedback during the design process. According to Krieger (2010), when “users look at a [lo-fidelity] prototype [they] see potential; [when] they look at a [hi-fidelity] prototype [they] see problems” (p. 70). Therefore, obtaining user feedback early and often in the process via a series of lo-fidelity prototypes is indispensable to the design process.

Prototypes may range from low fidelity (e.g., cartoons doodled on a napkin) to high fidelity (e.g., detailed, full-scale physical mock-ups). Low-fidelity prototypes focus on conceptually representing an idea to aid in answering questions resulting from idealized concepts (Vianna, Vianna, Adler, Lucena, & Russo, 2012, p. 123). Low-fidelity prototypes represent low investments in time and resources and are often most valuable in obtaining initial feedback from users. People are ordinarily less likely to share candid opinions regarding a prototype if they perceive the design team is highly invested in any one idea (Acumen, 2013). Additionally, low-fidelity prototypes encourage participants to build on the ideas the design team presents (Acumen, 2013). High-fidelity prototypes are detailed representations that approximate how the ultimate design will actually function (Vianna et al., 2012, p. 124). Each level of fidelity allows the design team to evaluate the prototype with potential users and stakeholders, and obtain feedback. A useful prototype is something potential users and stakeholders can interact with to provide valuable feedback.

Prototyping social processes or an interaction in a manner that facilitates testing and user feedback is challenging. Narratives, role-playing, and storyboards mapping out the structure or process of an idea can be useful. Narratives tell a descriptive story of the design team’s idea from the future. Role-playing allows potential users and stakeholders to simulate their role as they participate in a process or experience. Storyboards, or process mapping, allow users to visualize a particular process or experience (Acumen, 2013). Each method has value in evaluating certain aspects of a particular design.

Combining methods improves the feedback obtained on multiple attributes of the potential design. It is up to the design team to determine how best to represent a non-tangible process in a manner that elicits the most meaningful feedback and insight.

- Testing

Testing is a critical aspect of prototyping. Without testing, the design thinking process breaks down. A prototype without testing is an art project. The difference between an idea and a prototype is that a prototype is testable. Testing involves putting the prototype in front of stakeholders and potential users to learn from their reactions. The surest test of a prototype is not an internal review within the confines of a controlled environment, but out in the world where its intended users can experience it (Brown, 2009, p. 231). Every test provides insight that informs the design thinking process. Ideally, prototyping leads to new discoveries, new discoveries will lead to novel ideas, and new ideas will morph into new prototypes that require additional testing. Every test of a prototype improves understanding of the problem territory and knowledge of what approaches are feasible. To facilitate meaningful feedback from testing, it is important that stakeholders and potential users have a prototype with which they can interact.

The value of prototyping extends beyond user feedback. It avoids costly investments of time and resources in designs users will neither accept nor implement. Frequent prototyping also teaches vital skills of improvisation and creativity that nourish the design thinking process. Prototyping sustains a bias toward action and encourages continued improvement regardless of outcome.

B. THE DESIGN THINKING SYSTEM

Iterative discovery, ideation, and prototyping are only part of the larger design thinking process. These phases are part of a larger system that begins with an idea and ends with the user acceptance (see Figure 3).

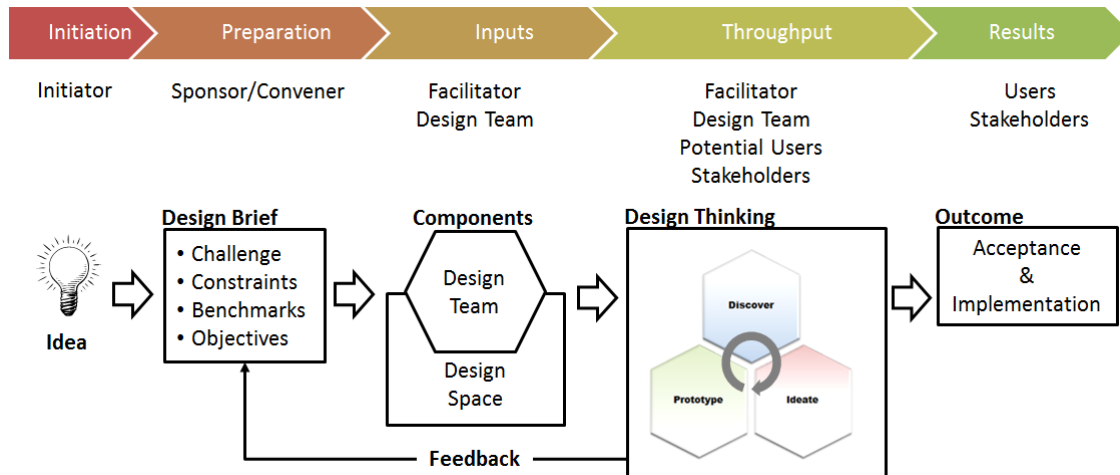


Figure 3. Design thinking process

The design thinking process does not begin spontaneously. Deliberate effort is necessary to set the conditions for the productive application of the design thinking process to a particular challenge and implement the result. The following sections describe each step in detail.

C. INITIATING THE DESIGN THINKING PROCESS

Initiation of the design thinking process begins with a determination of whether design thinking is suitable to the problem at hand. Design thinking is not a universally appropriate method of problem solving. It is a systematic methodology to facilitate innovative problem solving. At times, linear thinking is indispensable, and at other times, a linear approach creates more problems than it resolves. Linear methods of problem solving are suitable for resolving “simple” (Type I) problems, are correspondingly not suited for “complex” (Type II) problems and are often inadequate for “wicked” (Type III) problems (Roberts, 2000, p. 2). A design thinking approach to problem solving is best suited to coping with ill-defined problems when incremental change is insufficient.

1. Key Roles

Design thinking requires leadership to sustain the innovation process. The process and techniques of design thinking will appear very familiar to transformational leaders regardless of profession or field. Although, design thinking provides a framework for

leaders to establish a culture of creativity in their organization leaders must match thinkers with doers. It is up to leaders to mobilize their organizations for action in resource-constrained environments (Nelson & Stolterman, 2012, p. 5).

The design thinking process consists of five key roles: initiator, sponsor, convener/facilitator, design team, and relevant stakeholders.

- **Initiator.** The initiator is the individual who commences the design thinking process. When initiators identify a significant need or issue they are facing, they naturally evaluate what problem solving approach is most suitable and will most likely produce the best results. If the initiators lack sufficient resources or legitimacy to commence the design thinking process, they must identify a sponsor.
- **Sponsor/Convener.** The sponsor/convener plays a critical role in the design thinking process. The sponsor/convener provides purpose, direction, and resources to the design team. Most importantly, the sponsor/convener provides the legitimacy and resources necessary to encourage people to act (Kenty, Gosline, & Reitman, 2010, p. 16). The experience and judgment of the sponsor/convener is essential in determining whether the design thinking process is a suitable approach to coping with an issue, or whether an alternative problem solving method is more appropriate. When the sponsor determines that coping with an issue warrants a design thinking approach, the sponsor then provides the resources to support the design thinking process.
- **Facilitator.** The facilitator guides the collaborative process under the supervision of the sponsor (Kenty et al., 2010, p. 16). The facilitator is the most important role in initiating and sustaining the design thinking process to an implementable result. The facilitator consolidates resources and curates information to support the design team's innovation process. The role of the facilitator is particularly important during synthesis and interpretation to the extent the design team lacks experience with the ideation phase of design thinking process.

The facilitator may be a member of the core design team, or an impartial organizer trusted by the sponsor to manage the design thinking process. However, in situations in which the convener lacks sufficient experience with the design thinking process, an independent facilitator may advise and assist the convener as necessary during the design thinking process.

- **Core Design Team.** The core design team includes personnel trained and experienced in facilitating the design thinking process. The core design team is responsible for establishing a design space, executing the collaborative design thinking process, and providing feedback to the

sponsor (see section II.D.1, The Design Team, for a more thorough discussion of the composition and recommended characteristics of the design team.).

- Stakeholders and potential users. Inclusion of stakeholders and potential users is indispensable to the implementation of the results of the design thinking process. A stakeholder is any individual or entity that must make, or can block a decision necessary for successful implementation of the results of the design thinking process. The number of potential stakeholders is often undeterminable for ill-defined social problems characteristic of Type III, wicked problems. For the purposes of eventual implementation of the results of the design thinking innovation, it is useful to consider proximately relevant stakeholders.

Relevant stakeholders fall into at least one of three categories: someone who must make a decision to support the implementation of a prototype, someone who can block a decision mandatory for implementation, or someone directly affected by the proposed innovative change (Roberts, 2013). The degree of stakeholder involvement in the design thinking process correlates to the ultimate success of the problem-solving effort. The stakeholders will ultimately implement the best prototype that emerges from the design thinking process. Early and frequent inclusion of relevant stakeholders in the design thinking process reduces stakeholder resistance to innovative change.

2. The Design Brief

If I had an hour to solve a problem and my life depended on the solution, I would spend the first fifty-five minutes determining the proper question to ask, for once I know the proper question; I could solve the problem in less than five minutes.

—Albert Einstein (Seelig, 2012, p. 19)

The sponsor develops a design brief as a tool to initiate the design thinking process by providing purpose and direction to the facilitator and design team. Brown (2009) describes the brief as “a set of mental constraints that gives the project team a framework from which to begin, benchmarks by which they can measure progress and a set of objectives to be realized” (p. 22). Unique constraints, benchmarks, and objectives influence every design challenge. Knowledge of these dynamics informs the rest of the

design thinking process. Therefore, a good design brief consists of four components: the design challenge, constraints, benchmarks, and objectives.

a. The Design Challenge

A natural starting point for any effective problem solving approach is to frame the design challenge properly. A design challenge is a significant question that guides the design thinking process. It codifies the goal of the design team. Traditional problem statements presume a correct solution already exists and solving a particular problem is only a matter of implementing that solution (Kelley & Kelley, 2013, p. 99). A design challenge does not presume a solution exists.

A suitable design challenge is both significant (i.e., worth solving) and feasible (D. Blakely, personal communication, November 26, 2013). A significant and feasible design challenge comes from properly describing the problem space. A good design challenge often begins with a verb or is expressible as a “how might we” question (IDEO, 2009, p. 35). A “how might we” question makes insights actionable and is an invitation for input and guide for exploration (Acumen, 2013). This question becomes the design challenge. Developing a suitable and feasible design challenge is an essential first step toward the attainment of project objectives.

b. Constraints

All practical problem-solving approaches occur within a constrained environment. Design thinking is no different. All design projects have constraints of time, resources, and motivation. These constraints are dynamic. Additional constraints may emerge during the design thinking while certain contextual changes may eliminate others. As the design team improves understanding of the problem territory it provides feedback that allows the sponsor/convener to refine the design challenge. This assists in avoiding overinvestment in flawed ideas. Clear acknowledgement and acceptance of constraints is foundational to the design thinking process (Brown, 2009, p. 18). Knowledge of constraints grounds design thinking in the practical.

Constraints are interrelated. Ignoring this fact, and isolating one constraint from others, in an attempt to reduce the complexity of a particular problem, leads to an inherently flawed result. Kelley and Kelley (2013) explain that every innovation must balance three interrelated factors: feasibility, viability, and desirability (p. 19). Feasibility refers to the capacity of relevant stakeholders to implement a potential innovation (i.e., Is a potential innovation technologically possible?). Viability pertains to the practicality of a potential innovation (i.e., Is a potential innovation sustainable?). Desirability encompasses human factors associated with innovation (i.e., Do people want innovation?). A prototype that does not properly balance feasibility, viability, and desirability, or reside within the constraints of a project, is inherently defective.

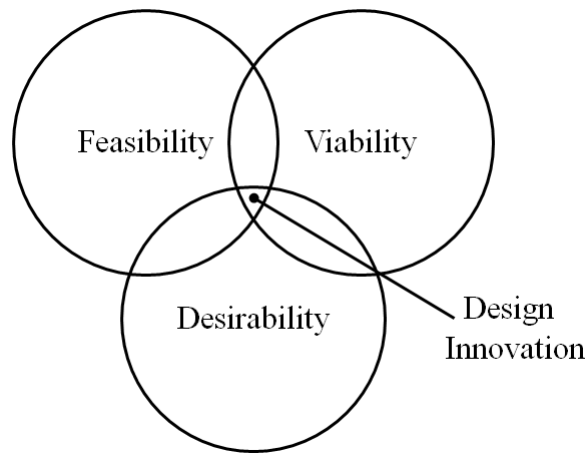


Figure 4. Factors of design innovation (from Kelley & Kelley, 2013, p. 19)

c. Benchmarks

Benchmarks are useful in keeping a design challenge on track to meet a deadline. They create opportunities to review progress and make mid-course corrections as necessary (Brown, 2009, p. 21). Benchmarks also are useful in providing feedback to the design project sponsor and stakeholders and opportunities for the facilitator and design team to reassess that the design project properly balances feasibility, viability, and desirability (p. 25). Moreover, benchmarks measure small-scale accomplishments vital to sustaining a culture of creativity essential to the larger design thinking process. Demonstrated small-scale accomplishment leads to larger success (D. Blakely, personal

communication, November 26, 2013). Furthermore, periodically reviewing the accomplishments of the design team can reinvigorate the design thinking process.

d. Objectives

A clear objective keeps the design thinking process focused and maintains the design thinking process as an active problem solving approach focusing on developing the possible. According to Nelson and Stolterman (2012), “designing is the means by which desired ends become real.” (p. 239). They explain, “Unlike scientific schemas, which represent true things, design schemas are used to form particular representations or aspects of ideal things out of a cloud of possibilities, in support of a divergent or expansive process of inquiry” (p. 7). Design thinking is about synthesizing information to create a new whole. A clear objective focuses the efforts of the design team.

D. DESIGN COMPONENTS

In addition to the aforementioned design brief, the design thinking process requires two other elemental inputs, a design team and a design space.

1. The Design Team

The design thinking process is a participatory problem-solving approach most effective when utilizing multidisciplinary groups. It is about building on the ideas of others to explore a multitude of possible solutions and produce prototypes (Davis & Tedesco, 2013). The heart of the design process is the design team. Without a team, the complexity of problems can quickly overwhelm the individual working in isolation. For this reason, the formation of a team is essential to the design thinking process.

The design team consists of two notable elements, a core team of two to three individuals with knowledge and deep expertise facilitating the design thinking process, and a larger multidisciplinary network of diverse, yet complimentary, members to address the design challenge. Experts, from different disciplines, who combine their unique perspectives and skills, have a higher probability of developing innovative solutions to problems than an individual working alone (Thoring & Müller, 2011, p. 38).

Thus, multidisciplinary teams uncover unique insights, make unexpected discoveries, and generate more new ideas.

Process without expertise is ineffective (D. Blakely, personal communication, November 26, 2013). During the course of thousands of design challenges, IDEO determined a design team functions best when formed around a core element of three to eight individuals, one of whom has experience facilitating the process (IDEO, 2009, p. 13). This core element is vital to guiding the larger interdisciplinary network to successful innovation. The first responsibility of this core element is to foster a culture of inclusiveness that encourages new members to participate in the design challenge, and then to guide the development of a larger problem-solving network. Consequently, this core element must have expertise in facilitating the design thinking process, as well talent for building and sustaining social relationships.

In navigating the larger problem-solving network through the design thinking process, the first task of the design team is to identify appropriate constraints, objectives, and benchmarks for the design challenge (Brown, 2009, p. 13). This approach allows the design team to define the problem territory and develop an appropriate design challenge. The design team then sets off to produce a prototype that meets the defined objectives within the time and resource constraints of its contextual environment.

The skills and abilities of a successful design team correspond to those of an effective brainstorming team. Sufficient conditions for effective brainstorming sessions include participants with (1) task interdependence, (2) established or burgeoning social relationships with other participants, (3) a personal investment in a successful outcome to the process, (4) pertinent technical expertise, (5) skills that compliment other participants, and (6) expertise in the process (Sutton & Hargadon, 1996, p. 688). The design team that possesses these skills is most likely to succeed in creating an implementable prototype that addresses the objectives of the design challenge.

The larger interdisciplinary network, on the other hand, leverages a mix of strong and weak ties. The strength of ties refers to the number and type of discrete connections between any two entities. Actors within cohesive subgroups have strong ties with other

members, while those actors in loosely affiliated networks predominately have weak ties with one another (Everton, 2012, p. 138). Strong social network ties equate to close friendships while weak connections refer to acquaintances. Weak ties provide important connections to outside groups. Granovetter (1983) demonstrated weak ties are more effective at connecting members of discrete groups than strong ties.

Collaborative network resilience is important to the long-term success of the project. The number and proportion of strong and weak ties significantly influences the resiliency of a network (Newman & Dale, 2005). Resiliency is largely a function of individual trust in other participants and optimism that the design thinking process will succeed. Brown stresses the importance of trust to the design thinking process by asserting, “Optimism requires confidence, and confidence is built on trust” (Brown, 2009, p. 77).

The relationships that sustain a design-thinking network require time and frequent face-to-face interaction. Having people present in the same location is fundamental to creating relationships, sharing information, brainstorming, and prototyping. Consequently, the design team needs a space.

2. The Design Space



Figure 5. Stanford Hasso Plattner Institute of Design (d.school) design space

The design space is a repository for information, a venue for ideation, and a location to develop prototypes. It is a physical space in which participants can come together and interact in a collaborative way. Virtual spaces are excellent methods for managing information but can create barriers to the design thinking process. Although virtual space has use in the ideation process, especially when potential users and stakeholders cannot travel to be in the same physical location, the actual work of the design thinking process must occur in a physical environment in which the design team can interact with each other with the fewest number of barriers between them.

Design space facilitates inspiration and assists the design team in focusing on the design challenge by creating an immersive and innovative environment (IDEO, 2009, p. 13). This environment has a profound influence on behavior and is a powerful tool to inspire collaboration (Doorley & Witthoft, 2012, p. 5). Often, the benefits of a dedicated design space can spread beyond the confines of the designated space.

The design space is a workspace, not a showcase (p. 7). It is a space for the design team to prototype and experiment with Whiteboard sketches, and collections of post-it notes, record ideas and communicate insights visually to other members of the design team and support continual progression (see Figure 5). Eventually ideas cover the walls and items collected from the field clutter the space. This eclectic assortment of material and thoughts nurtures a culture of experimentation and creativity. Without a dedicated design space, it is difficult for the design team to concentrate fully on the design challenge.

A design space is never finished. The design team should not accept a design space as a given condition (Doorley & Witthoft, 2012, p. 5). It must adapt to the changing demands of the design thinking process. Unfinished design spaces encourage continued reconfiguration. Conversely, polished, ostensibly complete spaces engender the opposite response (p. 7). As the design team transitions from ideation to prototyping, it often leads to a reconfiguration of the space to suit new demands and encourage continued collaboration. Thus, the ideal design space is modular.

E. ACCEPTANCE OF RESULTS AND IMPLEMENTATION

Acceptance of a prototype by affected users, and its implementation by stakeholders, is a vital component of the design thinking effort. The long-term success of a prototype requires a sustainable implementation plan supported by stakeholders (IDEO, 2009, p. 127). Implementation plans create incentives and leverage the capabilities of different stakeholders to promote the adoption process.

Continual feedback from stakeholders, potential users, and the project sponsor in the design-thinking project helps the design team to prepare the implementation plan and determine the viability and feasibility of potential solutions. Implementation requires communicating to stakeholders, and potential users, with sufficient clarity to gain acceptance of the new idea (Brown, 2009, p. 107). To the extent that the design team understands the incentives of potential users, and the stakeholders responsible for implementation, it increases the potential to develop acceptable prototypes. Ultimately, acceptance and implementation of the results of the design thinking process depends on how well the design team understood its users and their needs.

III. METHODOLOGY

Our review of collaborative problem solving and our experience working in embassies around the world have led us to conclude that a design-thinking approach is an excellent method to enable interagency collaboration within the USEMB network.⁴

A. INITIATION

1. Key Roles

- Initiator. We initiated this project with the idea that a design-thinking approach to the challenges of the interagency environment may improve the problem-solving process of an embassy country team.
- Sponsor. Navy Special Warfare Development Group (NSWDG) sponsored this project. The authors presented the design challenge for this project, along with a proposed methodology, to a command representative from NSWDG. The command representative assessed the project and provided funding to facilitate field observation of various interagency efforts. NSWDG sponsorship of the project provided legitimacy to the interagency community during field observations.
- Design Team. We acted as the core design team for this project. A more detailed description of the design team is available in Section 3.a of this chapter.

Dr. Nancy Roberts provided guidance to the design team drawn from her experience with the design thinking process. Additionally, she introduced the core design team to design thinking experts at the Stanford d.school and IDEO. She was instrumental in identifying and developing space on the NPS campus to host design workshops. She also led a design-thinking workshop of NPS students and faculty to demonstrate the process. This initial experience of participating in a design-thinking workshop assisted the core design team in facilitating subsequent design thinking workshops.

Anne Gibbon, a fellow at the Stanford d.school, provided frequent support to the efforts of the design team. She used her knowledge of design thinking and experiences at the d.school to prepare the design team for field observation and workshop facilitation. Her assistance to the

⁴ Design thinking is an iterative process that builds on the insights and information obtained in each preceding cognitive activity. It is difficult to capture the number of iterations of the process that the core design team went through in the linear format of static text.

project demonstrated the value of having an experienced design thinker regularly involved in the design thinking process.

- Stakeholders. Stakeholders in the interagency community are as numerous as they are diverse. The stakeholders included in this project were ambassadors, senior embassy personnel, senior military officers, operational commanders, and fellow students.

2. Design Brief

As initiators, we created their own design brief to guide this project. With input from the project sponsor, we developed a design brief that would provide focus to the project and would likely result in a desirable, feasible, and viable outcome within the constraints of the current environment.

a. Design Challenge

The design challenge that emerged for this project was the following: how might we (the authors) improve the problem solving of embassy USEMB country team?

b. Constraints

This project began with several clear constraints. We knew that any change to national level interagency manning, authorities or appropriations was beyond the scope of the project. Such actions take congressional approval we considered unlikely to occur in the time available.

As with all design projects, time and funding were a clear constraints. We had nine months to conduct the design thinking process while satisfying other professional, academic, and personal requirements. During this time, a USG shutdown due to sequestration in October 2013 delayed travel for field observations for three months, which further compressed the timeline for this project. This compressed schedule, and limited funding, restricted field observation and confined prototype testing to four episodic encounters with potential users.

c. *Benchmarks*

We identified five project benchmarks to ensure completion in time for graduation. Our first benchmark, in August 2013, was a literature review, as well as a project proposal. Next, we wrote a paper to distribute to our peers and to senior SOF and other agency leaders in October 2013. It provided important feedback and insight into various perspectives on interagency collaboration. This provided valuable understanding needed before our first design thinking workshop in December 2013. The purpose of this workshop was to develop ideas and prototypes to improve interagency collaboration. The fourth benchmark was field observation and prototype testing during the first quarter of 2014. The fifth, and final, benchmark was the submission of this project write-up during the second quarter of 2014.

d. *Objectives*

The primary objective of the overall project was to develop desirable, feasible, and viable prototype that improves interagency problem solving and decision making. We considered a prototype desirable if potential users expressed they wanted to employ the process in the future. A feasible prototype addressed the range of problems the country team may encounter within the bounds of the aforementioned constraints. Finally, the viability of the prototype was a function of whether other units or organizations could replicate the process at other embassies.

3. *Design Components*

a. *The Design Team*

Each member of the design team brought a unique perspective to the project shaped by previous experience working with embassy country teams. We connected with various individuals who provided a range of support from regular, direct participation to one-time discussions. We continue to receive feedback from this dynamic network of stakeholders and users.

b. The Design Space

During the course of this project, NPS developed a dedicated space to support design thinking activities (see Figure 6). The NPS design space provided a location for the design team to conduct initial design workshops that led to improved understanding of the process, new ideas for addressing interagency collaboration, and early prototypes to test.



Figure 6. NPS design space

While travelling, the core design team used existing office space and traditional conference rooms available at participant locations to hold design workshops. The authors used available whiteboards and wall space to facilitate the design thinking process. This step is likely to be the norm for other SOF teams seeking to replicate this process.

B. DISCOVERY

Personal observation during the discovery phase allowed us to observe regular and episodic interactions between subgroups within the country team network. It also allowed us to assess the impact of interpersonal dynamics on information sharing and coordination among the embassy staff. We spoke with current and former members of various agencies, all of whom possessed a variety of experiences working as a member of a country team. Additionally, our direct observation of the daily lives of the members of the country team provided insight into the problem-solving environment. It is possible that our presence disrupted the daily routines of those observed. To mitigate this possible disruption, we sought to match observations with available open source data written and prepared independent of our observations. We document these observations in Chapter IV.

To facilitate our understanding of the country team's problem solving methodology, we compiled observations, information, and experiences into a sociogram of the USEMB country team network (see Appendix B). Using social network analysis, we analyzed the formal and informal relationships within the country team. Analysis of network topology and centrality provided insight regarding the structure of the country team essential to understanding its existing problem solving process.

When possible we facilitated design thinking workshops so participants could go through their own design thinking process. In some cases, this required participants to gather information and observe applicable environments prior to attending the workshop. In other instances, we invited potential users and subject matter experts to share their wants, needs and concerns directly with workshop participants as part of the workshop session. These shared observations and experiences informed our ideation process. We discuss the results of this process in Appendix A.

1. Practice Design Workshop

We conducted our first design-thinking workshop in December 2013 with a group of 10 students and faculty from NPS, the Defense Language Institute (DLI), and the local community. The students and faculty represented current and former members of various

agencies with a wide range of experience. This workshop taught us a great deal about facilitating design-thinking workshops. We recognized the need for more training and experience to facilitate workshops and help multidisciplinary groups empathize with users, build on the ideas of others, and rapidly prototype.

In preparation for the workshop, we developed a design brief centered on the challenge of “How might we improve the interagency problem solving and decision making process within the embassy network?” We also invited participants to discuss their various backgrounds and experience working with country teams.

Once we assembled the design team, we introduced the design thinking process to the participants, and led them through some ice breaking exercises. We then conducted a mock interview to demonstrate how to elicit information and develop empathy with prospective users. We then had multiple pairs (interviewer and note-taker) speak with prospective users and subject matter experts.

Synthesis of field observations, empathy interviews, and other research, is critical to the design thinking process. After the participants shared what they learned, the design team developed user point of view (POV) statements. POV statements, when combined highlight similarities and inconsistencies between individuals who came from different professional backgrounds with a wide-ranging set of experiences. With the point of view statement, the designer captures concrete issues related to the design challenge stated at the beginning of the workshop. It is the workshop facilitator’s role to make educated guesses about those needs, based on the stories and data gathered.

One way to write a POV Statement is in the form: A [PERSON/GROUP] needs a way to [PROBLEM/NEED] because of [INSIGHT]. Similar to a MadLib, the design team replaces bracketed terms with words or phrases that reflect the insight obtained during the discovery process. A [PERSON/GROUP] refers to the user of the final design. We attempted to incorporate at least five adjectives to describe that person or thing. We added enough information to paint a picture of the person to someone who has not met him/her. An example of this is “A detail-oriented, reliable, certified accountant, who is curious and able to work in teams, as well as collaborative and creative.” The

[PROBLEM/NEED] uses a verb, instead of a noun, to define the challenges defined during the interviews. Nouns are often already solutions. For instance, contrast “An accountant needs a better pencil” with “An accountant needs a better way to capture data.” In the first case, the solution is already implied in the problem statement, so there is only opportunity for incremental innovation. In the latter frames, there is an opportunity to come up with innovative solutions that may go beyond an improved pencil. The [INSIGHT] provides a justification for the stated need. The insight often comes from connecting the dots between different elements on the empathy map derived from the interviews. In order to get a good POV statement, craft more than one and then select one that is neither too narrow or broad. For example, a narrow statement would be “An accountant needs to get a job at Main Street Bookkeeping” and too broad would be “An accountant needs a way to earn a living.”

These POV statements informed ideation. We split the design team into two smaller groups to generate ideas. Each of the groups then presented their ideas to the other. The whole group then voted on the ideas developed during ideation to select two feasible, viable, and desirable ideas to prototype. We conducted the votes by having each individual in the group stick a post it note under the idea that they liked best and thought was most feasible and viable to prototype. The spokesman for the group tallied the votes, which in this case was done simply by the visual effect of the first group having more sticky notes under their idea of developing a better USEMB collaboration space and for the second group’s idea of developing a shared interagency wikki-portal for information management. Both groups then shifted into prototyping.

Workshop participants again divided into two groups to develop prototypes of the selected ideas. Both groups developed mockups to visualize ways we might improve interagency problem solving within the embassy network. Although the mockups do not translate well to written text, the highlights that follow provide an overview of how the design team attempted to address the design challenge.

The first prototype was the creation of a virtual space. The intent was to create a mockup of a virtual information-sharing site for embassy network stakeholders. The subgroup developing the virtual space prototype decided to use an existing platform

(www.opensource.gov) as the foundation of the collaborative digital environment. The Open Source Center (OSC) collects and analyzes open source information (OSINT) from various sources from around the world and produces a variety of OSINT products. Furthermore, the OSC utilizes a customizable interface that allows users to select and display information deemed relevant. The ability to customize the OSC display allows existing embassy information technology support personnel to customize content to meet the needs of the country team.

The group speculated that a virtual space for sharing information among the country team would improve communication when used as a centerpiece during stakeholder meetings. The inclusion of a dynamic map as the centerpiece of the website also would allow various members of the country team to see and share a common visualization. This visualization would function as a method of communicating information to other members of the embassy network on demand (i.e., information is continuously available, and not only during discrete times, such as meetings) and allow members to assess and vet information used to inform decisions.

The second subgroup's prototype focused on designing a physical space for country team collaboration. The intent of this prototype was to create a mockup of a physical space where embassy network stakeholders could go to share information and obtain access to new information. The space would encourage face-to-face interaction and allow stakeholders and country members to socialize away from their traditional work area. The subgroup developed a modular design to allow users to reconfigure the space for regular meetings, encourage informal socialization, or as needed based on situational requirements.

Once both subgroups had a prototype, the users questioned earlier returned to the design space. Each subgroup presented its prototype to the users and solicited feedback. The users discussed what they liked about the prototypes and what they wished the prototypes would include or address. We then incorporated this feedback and refined the prototypes for their anticipated presentation to the country team we planned to visit.

2. Field Observations

We divided our field observations into two trips in order to maximize our limited time and funding. Our first trip took us on a whirlwind tour of several organizations located in Washington, DC, Virginia Beach, Virginia, Fort Bragg, North Carolina, and Tampa, Florida. Each organization we visited deals with interagency collaboration on a daily basis. The primary purpose of our visits was to speak with, and observe, people regularly engaged in interagency collaborative efforts.

We observed both formal meetings and daily operations at by spending a day at each location. Several similarities emerged. Often, the groups arranged themselves according to rank or seniority. A strong sense of mission and purpose existed in both organizations. A function of that shared purpose was a willingness to participate in collaborative efforts.

At one location, we were able to take a more active role in the collaborative process. We had the participants stand up, move away from the conference table, and circle up around a white board. Immediately, the dynamic shifted when we changed the hierarchical seating arrangement. The rigidity of the group disappeared and participants became more active and interested in the discussion. At that point, even the most junior person began to participate in the discussion. Since the group was standing, one of the individuals felt comfortable enough to retrieve some key documents from outside the room to inform the discussion. She later admitted that she would not have done so had the discussion remained around the table. This emphasized the importance of getting people up and away from their habitual meeting positions to foster a more interactive environment.

Our observations at Operation Panama Express (PANEX) revealed some characteristics of long-standing interagency collaborative success. At PANEX, each individual naturally felt able to contribute whether seated at the table or located in an office space down the hall. This natural communication stemmed from the early days of the organization, which encouraged everyone to drop rank and seniority from their assigned organizations and fully commit to the PANEX mission. The group instinctively

recognized the importance of creating a collaboration space and was in the process of turning one of their larger office rooms into what could describe as a design-space. The key insight taken from this organization was that creating a cohesion group and begins day one when each individual that joins the group embraces the organizational the mission. We briefly discuss PANEX as a model to emulate for interagency collaboration in Appendix A.c.4.

We traveled to the Pacific Command region for the second half of our field observations. During this trip, we had the opportunity to observe PACOM Augmentation Team (PAT) deployment preparation at Special Operations Center, Pacific Command (SOCPAC) headquarters in Camp Smith, Hawaii, and travelled to a USEMB to observe a PAT working with a country team.⁵

The PAT program is a good example of how an augmentation team from the Theater Special Operations Command (TSOC) can purposefully influence the country team by being able to tap into a broader network. The SOCPAC J35, LTC Ed Croot, successfully used design to build an effective PAT in Bangladesh. Prior to arrival in Bangladesh, LTC Croot took a month and a half to decipher over 1,000 pages worth of national policy guidance and individual agency documents to understand the mandates and missions described in each. Additionally, he probed into the objectives and desires of all interagency and host nation stakeholders. LTC Croot came to realize that design could help develop specific country guidance and objectives from this complexity. Using a design approach, he created a prototype, the country page portal, which is now the example for all PACOM countries and regional portals. The portal, used as a means to gain complete understanding of the environment, captures all the stakeholder objectives, and map out the current and future operations tempo (OPTEMPO) so that the PAT can constantly assess where its initiatives fit in line with the overall objectives.

From our field observations, we learned how design thinking balances the desires of each stakeholder. A well-planned battle rhythm allows all the stakeholders to lay their objectives on the table in advance to set benchmarks. Finally, the unique role of a PAT in

⁵ Chapter IV.D provides a brief description of the PAT program.

a USEMB allows it to add value to the overall mission. It has a unique capability to blend in and cover gaps for other embassy sections that may not have the resources or capabilities of the PAT.

3. In-Country Design Workshop

After briefly meeting one PAT in country, we invited the team to their hotel conference room to get them away from their work environment and into a neutral environment that would spur discussion. We were aware they were limited in the information they could share due to clearance requirements and the need to maintain operations security (OPSEC) in a non-secure location.

We began the discussion with the design challenge “How might we improve PAT team collaboration?” Questions surfaced such as how often the PAT meets, what venues they use, and the type of information exchanged. After their discovery phase, we moved into ideation. We asked the PAT members to identify ways they could better share information with each other. After 20 minutes of brainstorming ideas, several themes emerged. One of which related to using social engagements, like sporting events and holiday parties, as a means to discuss future initiatives. We narrowed down the scope of ideas and chose one to prototype - a social contacts list. This contacts roster identified the key country team members that each individual of the PAT meets with on a weekly basis. It also included the social activities in which the individuals participated in outside of the work environment. This roster could become a turnover item to capitalize on social engagement opportunities for PAT members to pitch initiatives to key country team counterparts, or receive information from and relay to the PAT team. This idea may not seem very innovative after having filled an entire white wall with sticky notes. However, it did prompt each PAT team member to think about how he or she needed to take advantage of every social interaction opportunity to engage his or her country team counterparts and to keep in the loop on all pertinent issues.

Even though we did not have the time to teach design thinking to the PAT in great detail, the workshop successfully introduced the team to a new method for approaching a problem common to each of the team members. Of most value, it provided user-based

input (human solutions) to the PAT team leader, which generated ideas not otherwise available using a traditional course of action analysis approach. This workshop illustrated how one facilitator with a basic knowledge of design thinking could introduce and lead inexperienced users in the process and develop options on the fly.

4. Sponsor Initiated Workshop

Towards the close of their project, we took one final opportunity to test out how SOF facilitators (our three-person design team) would introduce the design thinking process. Our sponsor requested that we could teach the design process to select intelligence and operations staff members of the sponsor unit to demonstrate how SOF units could use it to improve partnerships. Working with the staff, the authors condensed the design challenge down to a single statement: How might we build and improve SOF unit partnership opportunities? We designed a two-day design workshop to allow plenty of time for discovery and ideation. We opened up the group discovery process to eight international SOF peers from our NPS Defense Analysis department, which included members of Norwegian, German, Swede and Danish SOF units.

For the discovery phase, the eight staff members from the sponsor unit and the eight members of the internal SOF units were paired up with each other to conduct empathy interviews. We provided sample empathy questions and demonstrated how empathy interviews flow in order to prepare the pairs for their interviews. Next, the sub-groups wrote up the common insights they observed from the interviews and shared those insights with the larger group. Both sub groups provided feedback to clarify and add to the emerging themes. We then led the large group in developing POV statements from those overall themes. We explained how the creation of a POV statement enables a design team to ideate taking into account inputs from the user. The two sub groups developed two separate POVs. We then led an exercise to combine the two POV statements to form one POV statement that the large group thought best captured the sponsor's intent: How might we improve interaction activities with coalition partners so

that all SOF allies can bring their resources and knowledge to bear on the shared task at hand?

Due to the sensitivity of the specific design challenge, we moved to the workshop to a temporary design space in the NPS Sensitive Compartmented Information Facility (SCIF) for day two of the workshop. As discussed earlier, compartmentalization of information is an obstacle to collaboration. The effect of mitigating compartmentalization is particularly complicated when specific prohibitions information sharing exists. To overcome this, the design team must use a space where the design team can freely share and discuss information related to a sensitive design challenge. This is necessary for effective ideation in the design thinking process. Working with the sponsor unit members, the authors spent the morning refining the POV statement by asking the group to brainstorm all the challenges they face when looking to partner with specific allied NATO units, as well as list what successful partnership looks like. From that list of challenges and successes, the group brainstormed ideas, concepts, and activities that would best address those challenges, keeping “the what success looks like” in mind. Two main ideas emerged, 1) liaison officer (LNO) importance, and 2) cross-information exchange conferences and forums. We asked the group to prototype these ideas into tangible concepts for the sponsor to consider. One group redefined what the ideal LNO looks like by listing the criteria and qualities that both outgoing (representing the host) LNOs and incoming (supporting representative from the partner unit) should possess to improve their effectiveness. Group two listed the criteria, agendas, and key topics that an annual or semi-annual multi-national cross-tell conference might include. The two groups presented their prototypes to each other and shared detailed feedback to refine their prototypes. We The authors ended the workshop at the prototype phase since further implementation and testing was outside the scope and purpose of what the design team could provide.

Several insights emerged from this workshop. Most critical was the need for the design team to speak directly with the sponsor and hear his views of the challenges effecting his organization. Listening and observing directly from the lead sponsor would cut out any guessing and aid in developing a concise challenge statement from the very

beginning. Secondly, finding diversity out of a group of like-minded individuals is tough to do. In this case, all were members of the SOF community, which limited our ability to elicit diverse insights about the problem they were confronting. Inviting the international SOF partners studying at NPS was the best option available for this workshop. Ideally, we would have had the opportunity to invite other agencies outside the SOF community to get a diverse perspective. Lastly, when working on a tight timeline, the effectiveness of a video demonstration would greatly aid in the education of the newcomers to the design thinking process. A short video demonstrating how to conduct empathy interviews and a video on how to extract themes to move towards prototyping able would have helped guide the sponsor unit from phase to phase in the design thinking process. Incorporating these insights into future workshops will streamline the process and make them more effective.

C. IDEATION

Ideation occurred throughout this project. It was a significant component of the design thinking workshops conducted with various users and stakeholders. During these encounters, we emphasized ideation. We focused our limited time with workshop participants to capitalize on their creative thinking to generate ideas on how to facilitate a more collaborative USEMB country team network.

Throughout the course of our travels, we received further confirmation from the DOD and DoS senior leaders, as well as our peers, that design thinking would be a welcome addition to improving collaborative problem solving with U.S. IA partners in embassy country teams. Most of the SOF leaders believed SOF would benefit greatly by getting away from linear approaches to problem solving, and anything that could build trust with U.S. partners was worth the attempt. Many DOD leaders reiterated the need to build trust, noting that the greatest risk to the forward SOF mission remained personal conduct issues. One bad act can spoil the mission and the reputation of SOF. These same DOD leaders also stressed the importance of reducing competition and redundancy between and among interagency organizations attempting to collaborate. Lack of transparency between various SOF missions is an issue that requires attention. SOF teams

that know and effectively communicate their priorities can improve transparency. Many believe redundancy fuels unnecessary competition. In almost each engagement, someone said the same thing, “This is particularly timely and relevant.”

Senior leaders in the DoS are extremely complimentary of SOF and their extensive capabilities if utilized properly. Ambassador Yamamoto continually mentioned how SOF leaders could serve as close advisers to the ambassador and provide the ambassador options. He recommended that SOF teams should add visits to their respective regional desks as part of the education process, and he pointed towards the Joint Special Operations Command (JSOC) as the model of coordination at multiple levels, which should be used across the USSOCOM global network. Ambassador Yamamoto also stressed the importance of SOF finding methods to add value to the mission of the country as resources become more limited (D. Yamamoto, personal communication, January 27, 2014).

During our thesis research for this project, we found tremendous value in interdisciplinary and multidisciplinary teams within SOF and other organizations. IDEO and the Stanford Design School make this a tenant of every project and their successes hinge upon this important factor. One command we visited is already utilizing a multidisciplinary approach to tackle complex problems. They found and tapped into resident experts already working within their command who provided feedback and information, leading to non-kinetic approaches to problems. One such expert was an anthropologist specializing in the exact region they were working, but this person was working another innocuous job at the command. This collaboration would have never occurred if this command did not ask the right questions.

The ability to facilitate ideation is a skill developed through experience. Additional experience facilitating the ideation process improved results. As the authors gained experience with the ideation process, they were able to guide the process more effectively and create an environment in which participants felt free to share large numbers of ideas more rapidly.

D. PROTOTYPE AND TESTING

This project is the authors' prototype for using a design thinking approach to assist SOF teams in creating a self-organizing, interdisciplinary, and collaborative network capable of solving ambiguous problems. Each member of our multidiscipline design team brought a unique perspective to the problem-solving process. As we navigated the various design phases over the course of several iterations of the design cycle, we developed a model for SOF team employment that enhances interagency problem solving and decision-making within the country team environment.

We tested our various prototypes in two ways. We sought out subject matter experts (SME) and included them in workshops to invite their views about the design challenges. Their feedback informed the design thinking process and helped us create narrative and recommended process for SOF interaction with an embassy country team (refer to Section I.A) to distribute to colleagues, potential users, and SME.

The most productive tests occurred with potential users. These tests involved conducting design-thinking workshops with potential users during field observations, then soliciting immediate feedback. These tests often exceeded the user's expectations. One of our workshops led the participants to a candid and open interaction we considered unlikely during their initial contact with the team. The initial reaction from the workshop participants was a mix of hesitant participation and wary caution. Once the participants were encouraged to try the process, and realized that the group accepted ideas and deferred judgment, the change in the participant's demeanor was so dramatic it surprised the authors.

Feedback from participants gravitated toward particular aspects of the process. They mentioned they particularly liked how the design thinking process resulted in an immediately implementable tangible action. They recognized how it may help them accomplish their mission and said they would use the technique in the future. They also expressed their appreciation of the emphasis on user, not just "expert," research. That being said, their enthusiastic response and immediate realization of how it benefits their

mission, indicates that other people in similar situations would benefit from additional applied design thinking training and experience.

This capstone project report is the authors' prototype. It is the first attempt to offer general guidelines to SOF on how to improve collaboration within the country team. The following chapters highlight three guidelines for SOF augmentation teams working to address complex challenges as part of the country team: understand the country team and its context, educate and prepare SOF augmentation teams, and introduce design thinking to the country team. SOF augmentation teams can address these guidelines in any order; they are not a rigid checklist.

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IV. GUIDELINE 1: UNDERSTAND THE COUNTRY TEAM AND ITS CONTEXT

Countries establish embassies to foster diplomatic relations with other countries.⁶ These diplomatic missions are vital to maintaining a dialogue with partners and opponents alike. Each embassy is unique and performs its vital national function with varying degrees of success. The design thinking process requires active discovery to understand the context and develop empathy with potential users. This chapter describes the USEMB country team in Country X⁷ to illuminate opportunities for SOF augmentation teams to introduce and facilitate design thinking to improve collaboration within the country team.

A. DESCRIPTION OF THE COUNTRY TEAM

1. Participants⁸

An assortment of USG agencies and civilian sector organizations send members of their organizations to participate in the USEMB. Aside from the DoS, the embassy has representation from the DOD, CIA, USAID, FBI, Drug Enforcement Administration (DEA), Immigration and Customs Enforcement (ICE), Voice of America (VoA), Department of Justice (DoJ), Department of Commerce (DoC), Department of Agriculture (DoA), Foreign Commercial Service (FCS), International Narcotics and Law Enforcement (INLE) (U.S. Department of State, 2013a). The various agencies and organizations that participate within the inter-organizational USEMB share a common purpose and governance. Appendix B. Country Team Topology for a Social Network Analysis of the country team.

⁶ This overview of the USEMB country team draws on direct observation, personal correspondence, and open source information to identify entities and associated relationships that comprised the country team. Classification issues and lack of data availability mean this study does not capture every entity. Certain descriptions of entities are intentionally vague to avoid establishing relational linkages that could undermine ongoing operations or initiatives. As such, this country team overview does not capture information regarding the precise number, roles, and experience of specific entities. Instead, it concentrates on organizational, rather than interpersonal, relationships.

⁷ Country X represents an amalgamation of three USEMB country teams.

⁸ See Appendix B, Country Team Topology, for a Social Network Analysis of the country team.

2. Purpose

The shared purpose of all U.S. diplomatic missions is to represent the foreign policy interests and policies of the United States. The official role of USEMB is to perform political, administrative, economic, public diplomacy, and consular affairs functions as the official USG representative organization to a designated state (U.S. Department of State, 2013b).

3. Governance

Governance is of critical importance within an USEMB. The interrelated facets of governance include decision making, creating a problem-solving process, ensuring network members' participation in decision making, and establishing accountability for the network's decisions/actions (Roberts, 2013). Milward and Proven (2006) identify five essential network management functions: accountability, legitimacy, conflict mitigation, design or structure and commitment (p. 19).

The Chief of Mission (COM) is the manager of the country team. The COM works with the country team to fulfill the five essential network management functions Milward and Proven identified. The COM is accountable for everything the country team does, or fails to do. The COM can delegate decision-making authority within the country team, but cannot abdicate responsibility. Legitimacy is hierarchical within the country team. The President of the United States provides unequivocal legitimacy to the COM by virtue of the appointment process. The COM maintains this legitimacy with the assistance of the members of the country team. The COM establishes mechanisms within the country team to resolve conflicts. If a conflict arises that the country team cannot resolve, then the COM intervenes with the express purpose of making a decision best aligned with objectives of the USG. The COM designs, implements, and updates the structure of the country team by managing its members. The COM also oversees the commitment of members of the country team to ensure individual organizations contribute to the success of the USEMB.

The COM is responsible for the development and implementation of the Integrated Country Strategy (ICS). The ICS codifies the COM vision for the USEMB. It

describes COM goals for the diplomatic relationship between the United States and the host nation. The intent of the ICS is to “integrate all existing and new country-level planning processes and efforts into one single, multi-year, overarching strategy that encapsulates U.S. government policy priorities, objectives and the means by which diplomatic engagement, foreign assistance and other tools will be used to achieve them” (U.S. Department of State, 2010, p. 191). The Mission Strategic Plan (MSP) is the current planning tool and official method to disseminate the ICS to the embassy network (U.S. Department of State, 2010, p. 191). The MSP is the “annual strategic plan that outlines the intended goals, priority initiatives and performance indicators with targets for the country team” (U.S. Department of State, 2007, p. 59).

4. Leadership

Leadership is responsible for creating and maintaining the conditions that enable country team relationships. Country team leaders have three primary functions: holding collective vision, creating and managing relationships, and maintaining collaborative processes (Roberts, 2013). There are several leadership roles within the diplomatic mission.

The COM is the ranking USG official and the personal representative of the President of the United States to a sovereign state (Dorman, 2005, p. 10). The COM is either a career Foreign Service Officer (FSO) or a political appointee. Regardless of background, the COM is responsible for all U.S. executive branch employees in the host country excluding VoA correspondents and personnel under the authority of an U.S. area military commander (22 USC § 3927). The COM fulfills the three primary functions of a leader.

The Deputy Chief of Mission (DCM) is second-in-charge of the mission and responsible for day-to-day operations (U.S. Department of State, 2103b, p. 24). The DCM is a career FSO and acts as the Chargé d’affaires (i.e., diplomat in charge of the mission) in the absence of the COM. This relationship between the COM and DCM means that the DCM similarly fulfills the role of a leader. Specifically, the DCM plays a vital leadership role in managing relationships and collaborative processes. The

unrivalled authority of the combined offices of the COM and DCM underscore their roles as the lead dyad of the USEMB.

The remainder of the country team consists of the ranking members of each of the embassy sections and assigned agencies (see Table 1) (U.S. Department of State, 2103, p. 25b). The country team oversees the actions of affiliated sections and agencies within the host nation to ensure synchronization with the ICS.

Chief of Mission (COM)
Chargé d'affaires (Deputy Chief of Mission (DCM)
Counselor of Embassy for Commercial Affairs
Counselor of Embassy for Consular Affairs
Counselor of Embassy for Economic Affairs
Counselor of Embassy for Management Affairs
Counselor of Embassy for Public Affairs
Counselor of Embassy for Regional Affairs
Counselor of Embassy for Regional Security
Agricultural Counselor
Senior Defense Official (SDO)/Defense Attaché (DATT)
Military Attaché for Defense Cooperation
USAID Mission Director
Department of Justice Representative
Field Director, Library of Congress

Table 1. USEMB country team (key leadership roles)

The Senior Defense Official/Defense Attaché (SDO/DATT) is the senior diplomatically accredited DOD officer assigned to a U.S. diplomatic mission and the principle advisor to the COM for all DOD elements assigned to embassy (U.S. Department of Defense, 2007). DOD personnel assigned to a diplomatic mission in a foreign country under 22 USC § 2321i serve under the direction and supervision of the COM (United States Code, 2009), which is distinct from military units under the authority of the area military commander.

Units under the authority of the area military commander do not formally report to the country team or the COM. However, the geographic combatant commander (GCC)

often coordinates with the COM regarding military operations that may affect the political situation in the host country (U.S. Department of State, 2103b, p. 23). As Admiral McRaven states in a recent interview with the American Forces Press Service, “Special operations forces don’t train with other nations unless the regional combatant commander, the ambassador and the country team all give the go-ahead” (Parrish, 2013).

5. Environment

Country teams operate in a dynamic environment that demands flexibility and adaptation. For example, in Country X, the USEMB’s environment in early 2008 consisted of numerous factors beyond its direct control that influenced its activities. Perceived security, or lack thereof, profoundly altered the political, social, and economic environment of the country in the years leading up to 2008. During this period, a revolutionary group controlled significant sections of rural territory. At the same time, this revolutionary group enjoyed relative freedom of movement in trans-border regions. The group used its relative strength in these areas to influence the population, which created a social environment in which Country X’s population felt they were reliant on U.S. support of their government to prevent a security crisis that would destabilize an ailing economy. The stagnation of Country X’s economy, resulting from the tenuous security environment that existed during the years preceding 2008, pressured Country X’s political leadership to take active measures to grow popular support for the government of Country X. This situation illustrates how host nation power brokers and regional dynamics influence the country team.

Geographical and terrain characteristics of a country also affect the USEMB. In Country X, rugged, mountainous, jungle reduced the effectiveness of certain methods of technical intelligence collection. Vast tracts of harsh wilderness concealed the movement and activity of the revolutionary group and inhibited access to certain areas by official government representatives. Military actions targeting the revolutionary group along ill-defined international borders of the region strained diplomatic relations among regional governments. The revolutionary group used the geographic advantages of the trans-border area and the lack of sustained political cooperation between the countries involved

to confound government efforts and establish safe havens from which to train, refit, reorganize, and stage operations.

Technological changes during this period influenced the environment of both light and dark networks with elements in Country X's territory. Advancements in information communication technology reduced the transactional costs previously associated with collaboration and communication. This increasingly allowed geographically dispersed groups and elements to communicate and synchronize efforts. Thus, collaboration was possible where it previously was not feasible or sustainable. Ultimately, a correlation emerged between the level of technological capabilities and the level of understanding of the environmental characteristics of Country X.

6. Key Success Factors

Country X's environment in the years preceding 2008 emphasized the need for three key success factors: security, resources, and social capital and accountability. Security is essential to operating in hostile territory, such as the rural portions of Country X. Without security, network members were physically vulnerable. Such a pervasive threat made it difficult to function since country team members were unable to focus on other tasks and responsibilities. Constant threats also undermine the ability to collaborate. In Country X, it was essential to establish local security before attempting any other interventions.

The ability to access resources directly influenced the ability of the country team to complete projects in line with its purpose and overcome some of the challenges of a harsh environment. Physical resources (e.g., water, food, and shelter) or intangible resources (e.g., intelligence or innovative ideas) dampened tensions caused by political, social, and economic environmental factors. In Country X, many issues the country team encountered resulted from the availability and access to resources by a particular group. The country team actively managed resource distribution among member organizations. Increased availability of resources often reduced social, political and economic tensions.

The more limited the number of resources, the more important accountability is to any network. The accountability of the government to the population correlated to the

level of national political and social tensions. In Country X, the USEMB carefully guarded the legitimacy of its government to the population. Ultimately, accountability improved the social and political environment in Country X to an extent that facilitated success.

B. COUNTRY TEAM INTERACTIONS

A combination of competition, credibility, and trust affect the institutional processes, loyalties, and behaviors of the country team. As Colonel Rickey Rife (1998) explains in *Defense Is from Mars, State Is From Venus*, deep cultural roots exist within each organization based on the charters establishing each organization (p. iii). The DoS exists to establish and preserve peace through diplomacy, while the DOD protects the nation through the application of military force to fight and win wars. These two departments are sometimes at opposite ends of the war and peace spectrum, which engenders competition as each organization struggles to remain relevant to national policy and grand strategy. Finite budget resources and manpower shortages exacerbate levels of competition between organizations. A perception that an agency failed to achieve the ends specified in policy, or is irrelevant, threatens that agency's share of the budget. Credibility and trust are essential in this competitive environment. Each organization has its own way of preparing its leaders and representatives to operate within the country team. Differences in an organization's preparation and education directly affect communication during collaboration.

1. Locus

Locus is where the country team "lives," operates, and has a repository for its history. Each agency and organization that assigns representatives to the USEMB maintains a headquarters in a different location. The headquarters for most of the agencies represented at an USEMB are located in Washington, DC, with the exception of the DOD components of the embassy. The distant location of these headquarters is an important consideration within any country team, since most of the decision-making authority for a particular agency or organization often resides at these geographically separated locations. With the exception of the ambassador, very few senior decision

makers reside at the country team level. Presidential Policy Directive-8 (PPD-8) outlines policies each agency must follow to achieve national readiness. The Principals And Deputies Committees who drive this policy hold a strict routine of meetings and staff engagements to discuss and distribute national policy level issues. This cycle can drive the country team's actions.

At the micro level, loci are structural divides that result from compartmentalization, security classification, and the structural design of the chancery. The chancery in Country X is massive, and consists of three stories and spanning beyond the length and width of a football field. Each section resides behind cyphered doors requiring collaborators to pre-plan and arrange all meetings. Another important space in the chancery is the bubble. The bubble is a classified and tightly controlled room in which the key representatives from each organization meet to disseminate information to the group and seek approvals from the ambassador. Formality and hierarchy dictate acceptance and seating within the bubble. An invitation into the bubble requires credibility with the COM.

The embassy compound serves as a repository for the history and identity of the USEMB. Some embassies display the culture of the host nation as a show of partnership and understanding. Other embassies might display tributes to the mission at hand, especially if bloodshed has occurred in pursuit of the USG's interests. All USEMBs maintain a proud heritage and allegiance to the U.S. flag, and ensure all buildings are well kept as a show of discipline and prosperity. The physical characteristics and confines of the embassy compound have a pronounced effect on the culture of the USEMB.

2. Culture

Culture is the factor that marks a country team's unique identity, core values, and norms. Every embassy is different in regards to the level of formality, hierarchy, and sense of purpose. Most embassies have a very formal dress code with prescribed procedures for interacting between sectors. Some sections dress casually depending on levels of responsibility or a requirement for manual labor. For example, war-zone embassies might relax standards to allow embassy personnel certain comforts and

protection for living within a combat zone. All meetings and official business requires the upmost formality. Although tensions may exist between organizations, a heated debate, or venting, is only permissible behind closed doors. When the COM establishes a shared purpose (e.g., rescuing of American hostages or a commitment to disaster response), an enormous sense of urgency and passion occurs among the country team. Each agency attempts to retain its own unique identity within its own office space as visibly displayed by agency logos and insignia. The country team itself possesses little common identity.

3. Interactions

Interactions concern how people relate to one another. The environment in Country X is permissive enough to allow frequent engagement outside of the embassy with the host nation, both military and diplomatic. Most members interact with others directly through face-to-face communication to facilitate strong personal relationships, which makes it difficult to create and maintain a larger network culture. Email and telephone conversations exist to communicate between each agency within the embassy, but each organization retains its own network technology system as its primary communication medium. Often, agencies ignore these communication systems, or consult them only on a weekly basis, which induces some delays in communication. Video teleconferences (VTCs) are the most common method for communicating back to headquarters or addressing the principles/deputies committees in Washington, DC. The country team expends a great deal of effort to preparing for, and host, frequent congressional, foreign diplomat, and senior military visits. The country team emphasizes the need for agreement on a common key “take-away” or “due out” prior to the visitor’s arrival; otherwise, the country team sees the interaction as a wasted opportunity to advance initiatives.

4. Orientation

Orientation refers to how a network is driven—either by discovery or by results—to achieve its purpose. The country team is results driven. The USEMB seeks an outcome congruent with promoting U.S. national interests or effectively responding to a crisis. Parochialism and competition between the agencies hampers discovery. Progress occurs

only through agreement on how to approach the problem. Even an initiative as seemingly clear-cut as rescuing American hostages or responding to a disaster can fail to draw a consensus, due to the various perspectives of each agency.

5. Leadership

Leadership relates to how the country team integrates and functions as a whole. As mentioned earlier, the COM and the DCM lead the country team. Each organization within the country team does not assign personnel its leadership positions equally. For example, within an embassy, the senior intelligence officer can be a Senior Intelligence Service (SIS)-III (equivalent to an O-9, or three-star Admiral), which is equivalent, or just beneath, the rank of the ambassador. However, the FBI Legal Attaché (LEGAT) and DEA resident agents in charge (RAC) are often one level beneath, while the senior military official is typically an O-6. Sometimes competing organizations misperceive individual rank as the level of attention and priority that the respective agency places on the position. In embassies outside of the declared theaters of armed conflict, or those without a large security cooperation program, the DOD components place a lot of responsibility on its mid-level leaders. The DOD will likely continue a trend of assigning individuals of higher rank to an USEMB depending on environment and desired outcome.

C. COUNTRY TEAM PERFORMANCE

Assessing the performance of any network, including a country team is a normative decision (Kenis & Provan, 2009, p. 443). The criteria are subjective and are dependent on multiple normative determinations. Suitable criteria depend on the intended purpose of the network. The purpose of the country team is to produce outcomes (e.g., sustained symbiotic relationship between the United States and a designated state) rather than outputs (e.g., successful, yet episodic, operations like targeting a resistance group). Therefore, an evaluation of the performance of an USEMB country team requires an assessment of how well it achieves its purpose of achieving U.S. policy interests.

Examination of one USEMB prior to 2008 provides insights into country team performance. The year 2008 was an important period for this particular USEMB because

during that period, the country team contributed to the successful rescue of American hostages from a revolutionary group, after many years of captivity. As part of the rescue operation process, the USEMB produced many outputs in the forms of operations successfully executed and projects completed. This multi-year effort produced a sense of shared purpose within the embassy. This outcome of shared purpose was the result of the inter-organizational trust derived from the work of connectors within the network, which improved network performance by facilitating increased collaboration.

The shared purpose and responsibility for rescuing the hostages resulted in disparate elements in the embassy working together. Several times during the five-year period from 2003 to 2008, the host nation government provided various leads regarding the possible location of the hostages to the USEMB. Due to this cooperation, SOF had the capacity to surge large elements into Country X to stage a potential rescue operation. Each occurrence had a significant effect on the USEMB. The DoS' political/military (Pol/Mil) section would rush to expedite country clearances, the administrative section would surge to find housing or vehicles, and DATT would work with the armed forces of Country X to deploy the SOF units around the country. During these periods, the USEMB worked toward the same goal, that of ensuring the three Americans returned with honor.

1. Outputs

Output are tangible products and services. One of the most significant outputs of the country team was host nation led, U.S. supported operations, which led to the rescue of American hostages. During the five years prior to the rescue, the USG provided billions of dollars in aid to Country X, and conducted numerous training events. The combination of U.S. material and information support fostered a sense of shared purpose and responsibility among the USEMB, which enabled collaboration between elements of the USG and Country X's government that ultimately led to the rescue of the hostages.

Another important output was a measurable reduction of the capacity of the revolutionary group. The hostages had provided this group with a leverage point for issues dealing with the United States. Following the rescue of the hostages, U.S. and

Country X's forces were able to intensify kinetic operations against the revolutionary group. Increased numbers of captured and killed revolutionary group members following the rescue of the hostages was a result of the USEMB's material and technical support to the host nation. This intensified campaign brought the revolutionary group to the negotiating table. Interrogations of key enemy leaders captured after the operation to rescue the hostages revealed a weakened organization.

2. Outcomes

Outcomes are a consequence of an output. The numerous successful operations the USEMB facilitated led to a successful outcome for the network. These operations significantly improved the security situation in Country X. Not only did this improvement have immediate impacts on the political, economic, and social environment, but it also created ties that supported enduring cooperation between the USG and Country X. As of this writing, the revolutionary group is looking to demobilize as many as 20,000 fighters as part of their negotiations with the country's government. SOF have continued to strengthen, advise, and assist efforts with the host nation, which indirectly strengthened diplomatic ties between the embassy and Country X, and also aided in other regional humanitarian efforts. By 2008, cooperation between U.S. SOF and Country X's military units significantly stabilized the security environment. Interagency and international collaboration is critical to the success of the USEMB and is a key aspect of the country team's continued success.

Such collaboration did not occur without remarkable leadership. The ambassador to Country X provided the strong leadership necessary to ensure the different agencies set aside petty differences and worked together. He routinely brought key leaders together in the bubble to share information and intelligence to ensure these agencies maintained congruent missions. He personally led many of these meetings, and did not tolerate antagonists. This is not to say the process was perfect. As with any team, discontent occurred among the stakeholders in the embassy team. The military, intelligence, and law enforcement agencies (LEAs) had to ensure their agencies had sufficient representation and that they had the appropriate authorities to execute their partition of the larger

embassy network mission, which often led to perceptions of competition that ignited turf battles among agencies. During these divisive periods, the COM played such a crucial role in ensuring the country team performed to its maximum potential.

Although often successful, country teams can benefit from improved collaboration to improve resiliency and trust. The outcome described above is the result of contextually specific outputs. Resiliency is important to maintaining established collaborative relationships as personnel turnover within the network. Trust is important to maintain the cooperative relationships that produce tangible results.

The process of discovery revealed the presence of PAT working with select country teams. These teams were the result of deliberate PACOM efforts to improve DOD performance by working closely with members of a country team.

D. PACOM AUGMENTATION TEAMS

In 2009, PACOM developed a program to improve DOD collaboration with country team members and enhance performance. The result was the inception of the PAT program. The PAT program expanded upon the former role of the Military Liaison Element (MLE) working as part of the country team.

The PAT program provides the PACOM commander with a continuous presence in key locations to provide situational awareness on an array of cultural, political, and security issues. Under the current arrangement, the PAT coordinates its activities on a day-to-day basis with the director of intelligence and the DATT. This arrangement may change as a result of any interagency agreement to regularize the PAT, or if a senior SOF leader were added to the embassies permanent manning list (NSDD-38). The PAT directly addresses COM priorities and contributes to the accomplishment of country team objectives in several ways.

- The PAT assists the COM in assessing counterterrorism capabilities, drawing from PACOM resources and coordinating with law enforcement and host nation partners to provide a common operating picture (COP) tracking mission CT programs.

- The PAT, in conjunction with other agencies, coordinates DOD SOF support to U.S. CT activities, as well as support and training of host nation SOF.
- The PAT identifies civil vulnerabilities exploitable by terrorist organizations and seeks to mitigate those vulnerabilities.
- The PAT plans, coordinates, supports, and synchronizes information operations executed jointly with host nation counterparts, which encompasses countering violent extremism, counter-recruiting, and anti-violence messages.
- The PAT provides operational support for ad hoc military missions to the country or region providing relief from natural disasters, such as tsunamis and earthquakes.
- The PAT provides assistance in the planning and execution of the country teams' Emergency Action Plan, particularly in the event of an evacuation requiring the mobilization of PACOM forces.

The PAT program is one example of a successful effort to improve DOD and country team collaboration. Regularizing the PAT program would create a stronger basis for its contribution to the country team, while maintaining flexibility for the future. We identified PAT as an important entry point for improving collaboration within the USEMB country team. USSOCOM can replicate the success of the PAT program by creating, educating, and training similar SOF augmentation teams to work as part of country team around the world. Thus, we turn to the issue of how to prepare SOF augmentation teams with the knowledge skills and competencies prior to assignment to a country team.

V. GUIDELINE 2: EDUCATE AND PREPARE SOF AUGMENTATION TEAMS

SOF leaders require preparation before entering and navigating the labyrinth of agencies and relationships that comprise a U.S. embassy country team. The United States is the world's preeminent military power chiefly due to a substantial effort to train military leaders to tackle the diverse challenges of combat operations. However, this emphasis on battlefield effectiveness has unintended consequences. Although the U.S. military is adept at instructing leaders to employ innovative technology, tactics, procedures, and equipment to counter contemporary threats, it does not sufficiently educate those same leaders for the uncertainties of achieving objectives through collaborating problem solving with their interagency colleagues.

Recalling upon some of the challenges to collaboration discussed earlier, the authors identified several general principles drawn from both their own experiences and suggestions from other USEMB country team experts that would improve the country team collaborative problem-solving process. Communication and cultural understanding were recurring themes throughout their engagements and have traditionally been the most challenging to master in the country team environment.

A. COMMUNICATION

Collaboration cannot occur without effective communication. Notably, one of the chief obstacles in the standard country team working-group meeting is getting the section heads to share meaningful information with such a broadly represented group. Setting security clearance and compartmentalization issues aside, the following suggestions are ways in which to improve communication.

1. Know the Stakeholders and Their Incentives

Issues are often contextually unique and involve a variety of stakeholders. Appreciating the roles and responsibilities of various deputies and principles, combined with any knowledge of their stance on a particular issue, is crucial to developing trust and reliability within the country team. At a lower level, it is vital to pass on only the

information that pertains to the agenda of that meeting or discussion. Remember, the stakes are different for each stakeholder. For example, the regional security officer (RSO) focuses on issues that affect the security of the embassy, while USAID focuses on host nation development.

2. Maintain Positional Flexibility

SOF leaders must remain ready to step up to, or step down from, a leadership role during embassy meetings as necessary. Many country teams collaborate via an unstructured tabletop discussion. In this context, many SOF leaders want to take charge. However, it may sometimes be best to take a step back and first analyze the situation. SOF leaders must remain ready to assume the lead role in the absence of a designated lead agency representative or other formal meeting leader. Some groups may even want or expect SOF personnel to take the lead. Egos often get in the way of collaboration. A SOF leader who takes a humble approach can often reduce negative cultural stereotypes of SOF.

3. Socialize Concepts

SOF leaders must make an effort to visit all interagency stakeholders in their setting and follow-up with them as the situation develops, which is a recurring theme after SOF deployments to embassies. Country teams sometimes intentionally compartmentalize initiatives for security. Finding a balance between intrusiveness and remaining an outsider is crucial when building trust. Similarly, effective SOF leaders take the time to out brief their interagency partners at the conclusion of the mission.

4. Tailor Every Briefing to the Audience

SOF leaders must be conscious of the audience's background and time available to deliver an appropriately detailed message, which requires the ability to intuitively know the audience or gather information beforehand. Briefing the COM will likely require little historical background due to the COM's extensive knowledge of the region and continuous attention on the given topic. However, a briefing to a visiting congressional delegation (CODEL) or congressional staffer may require significant

background. It is frequently best to avoid using PowerPoint slides and to adapt each interaction to the level of understanding of the primary audience.

5. Remain Professional, Likeable, and Approachable

Some personnel, especially those in agencies with limited customary interaction with the military, view DOD personnel as Hollywood caricatures. These individuals often view military personnel as an insular, jocular group with a strange language and aggressive personalities. However, SOF personnel who remain professional, likeable, and approachable dispel hostility resulting from such simplistic stereotypes of military personnel.

B. CULTURAL UNDERSTANDING

Referring back to the “Challenges to Collaboration” section in Chapter II, many issues surface due to the diverse dynamics of the country team. The following demonstrate some of the cultural fundamentals necessary to overcome the differences commonly found within it.

1. Know the Chief of Mission’s Strategic Guidance

The COM is the President’s representative to a given country. The current Presidential Letter to COM, ICS, and the mission resource requirements (MRR) are essential reading prior to arriving at the embassy. Remember, SOF work with the COM, on behalf of the GCC. Ambassador Donald Yamamoto succinctly summarized the role of SOF working with the country team, “[SOF teams in the embassy] are protectors of the flank and supporters of the mission” (D. Yamamoto, personal communication, January 27, 2014). To support the USEMB mission, SOF personnel must know and understand COM’s guidance.

2. Develop Organizational Knowledge

Knowing the roles, responsibilities, and authorities of interagency partners in the interagency environment is vital to understanding how they fit into the COM’s objectives, and ultimately, the national policy objectives. With an understanding of an

agency's mission and local capabilities, natural areas for collaboration become evident and can yield opportunity. Something as simple as providing an interagency colleague with transportation to an area where a SOF team is advising and assisting host nation forces maximizes available resources and can advance the overall U.S. embassy team's effectiveness through shared experience.

As organizational knowledge increases, so does empathy of interagency colleagues. Empathy increases opportunities for collaboration and compromise. Some interagency representatives may oppose an initiative for a variety of reasons, but escalating the situation or venting within earshot will only erode credibility. If an individual blocks an initiative for petty reasons, it is best to step back and re-engage later. Taking the time to empathize with interagency colleagues can illuminate reasons for reluctance to support particular initiatives. SOF leaders who encounter inter-organizational friction should seek to understand their colleagues' perspective and rationale before re-engaging.

3. Learn the Historical Ties within the Embassy Network

Always remain cognizant of the long-standing ties that agencies maintain with each other, with non-governmental organizations (NGOs) and with the partner nation, which will be unique in each overseas location. Due to recurring SOF personnel turnover and short duration tours, history is often forgotten and the host nation counterparts are cautious about DOD's long-term strategy in their country. Knowing who the original stakeholders were, and currently are, and how a given initiative developed, will help preclude disputes over future partnerships. Some agencies have habitual relationships and operations that one SOF initiative could derail with devastating and lasting impacts. However, SOF leaders must also learn to recognize *why* their interagency colleagues say "no." A difference does exist between "no" as the easiest answer and "no" because it is upsetting a historical relationship essential to the long-term country strategy.

4. Compromise Is Essential to Collaboration

Military action is rarely unilateral. Always have alternative courses of action and know when compromise is necessary. Opportunities pass when individuals ignore the

possibility of a compromise. Sometimes “no” simply means “not that way” and flexibility and additional attempts to find commonality can result in successful collaboration. If the first reaction of colleagues is not concurring with a course of action because it was not their idea, or their boss is demanding something different, consider a compromise. Through compromise, all agencies can achieve their primary objectives.

5. Perceptions Matter

The DOD has significantly more resources than other agencies. SOF leaders must make every effort to exhaust their own means and resources before seeking outside help. Other agencies often view the DOD as a provider and enabler. Some agencies perceive the DOD as over-manned and over-resourced. Common knowledge of the DOD budget frequently leads to challenges when SOF asks others for support. SOF is often in a position to offer internal resources to U.S. partners. Use available resources to support the COM’s strategy. Do not use the resources to establish a quid pro quo relationship with other agencies.

6. Define Shared Metrics for Success

Identifying and defining shared metrics of success for the country team to work towards is a challenge due to the diversity of the culture. Broken down into three areas of impact (social, process and results) metrics for success become recognizable to everyone, no matter if they come from the DOD or the DoS. Since the country team often collaborates in working groups, these groups should base their performance on the following. (1) Social—did the working group encourage shared generative activities between individuals who do not typically interact? (2) Process—did working group members come away with a basic understanding of the process or initiative being discussed? For instance, if the SOF team leader is trying to introduce design thinking as a potential problem-solving process that the country team should adopt, the team leader could ask: Does the group understand the art of design thinking? Do they value user research, the importance of brainstorming, and the potential of quick prototypes? (3) Results—did developed concepts provide measurable benefit? Every working group must

strive to provide some measurable benefit. This can be as simple as all participants leaving the meeting with a better understanding how they can support the overall mission.

SOF augmentation teams must prepare for assignment to a country team. The specific communications skills and cultural knowledge described above are only part of a successful integration into the country team. A SOF augmentation team can provide more value to the COM by using its unique capabilities to improve collaboration within the country team. One method for SOF augmentation team to improve collaboration is by introducing the design thinking process to the other members of the country team.

VI. GUIDELINE 3: INTRODUCE DESIGN THINKING TO THE COUNTRY TEAM

A SOF augmentation team with the knowledge, skills, and competencies to facilitate the design thinking process add immediate value to the country team. Design thinking is a way to improve collaboration within existing manning, appropriations, and authorities. The intent is to develop desirable, feasible, and viable ways to address complex problems by including as many stakeholders as possible through the design thinking process.

SOF augmentation teams would benefit from learning about the various facets of the design thinking process then reinforcing this knowledge with practical experience in facilitating the process with an interdisciplinary group. The methodology described in Chapter II introduces the design thinking process and provides understanding of how aspects of the process relate to each other. However, simply understanding this material, without practical experience facilitating a design thinking workshop, is insufficient preparation to introduce the design thinking process to the country team.

A. THE DESIGN TEAM

The design thinking process within the country team requires the same five key roles discussed earlier in Section II.C.1. The roles need not be external to the design team, and an individual may fulfill multiple roles within the design thinking process.

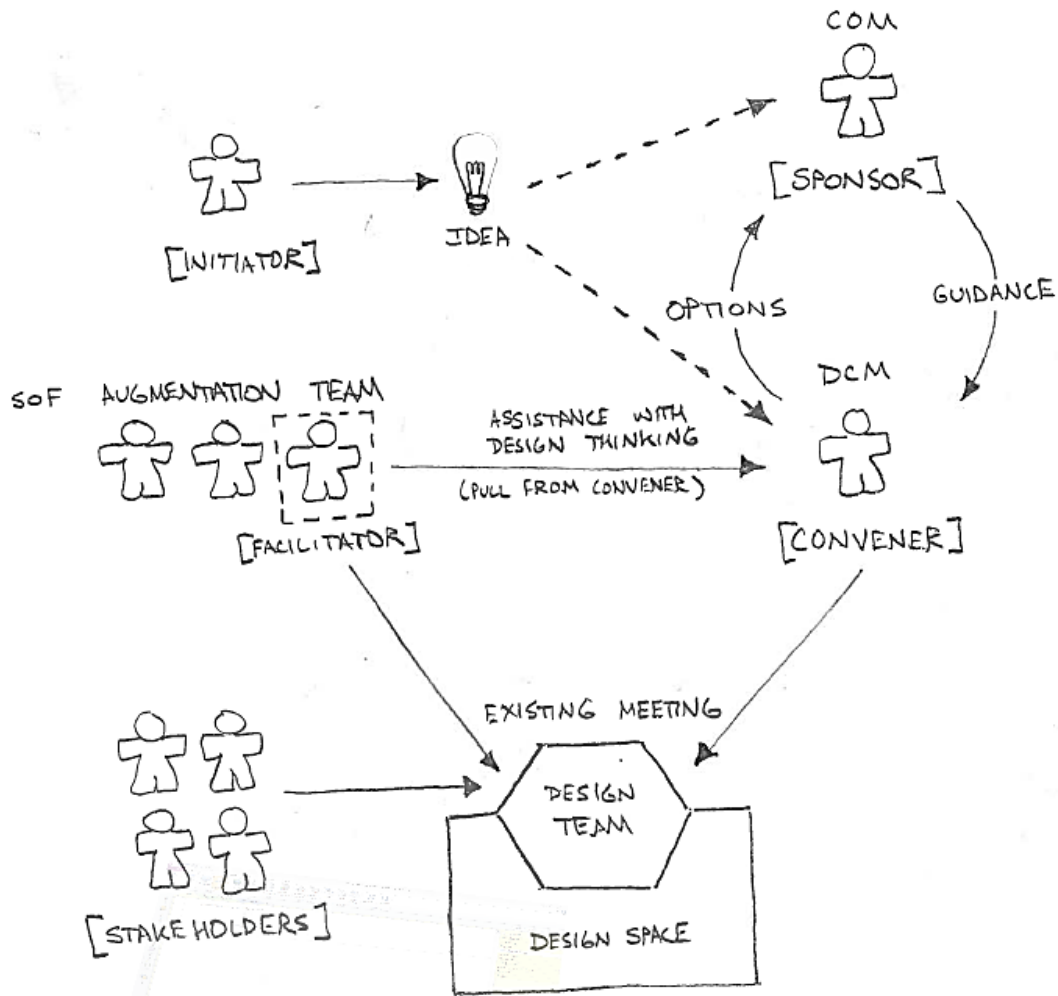


Figure 7. Key roles of the design thinking process within the country team

1. Initiator

Anyone within the country team can initiate the design thinking process by sharing an idea with a sponsor or facilitator within the country team. The COM may initiate the design thinking process with a priority challenge requiring immediate attention from the country team or a junior FSO may identify an emerging situation that requires country team attention. Regardless of the source of a prospective design challenge, the initiator shares that information with the sponsor/convener to begin the design thinking process.

2. Sponsor/Convener

The design thinking process requires a sponsor/convener with the legitimacy and resources necessary to encourage people to act. Introducing new technology or processes to a group is typically ineffective without the support of a sponsor to promote its acceptance and implementation. The COM, or the Chargé d'affaires, is the clear sponsor within the country team. Correspondingly, the DCM is a natural convener for many of the challenges a country team faces. Regardless of the reason for supporting the design thinking process, the sponsor/convener provides purpose and intent to the process. Whether the COM or the DCM, the sponsor/convener provides guidance to the facilitator regarding country team priorities and emerging issues to guide design team efforts.

The COM may elect to support the design thinking process for a variety of reasons. Design thinking is useful to the COM when she requires a way to develop a deep understanding of an emerging crisis, to engage stakeholders, to transform existing knowledge into a practical strategy, or simply to create a more innovative embassy environment (IDEO, 2009, p. 17).

3. Facilitator

The facilitator leads the design thinking process. The role of the facilitator is vital to introducing the design thinking process to the country team. The facilitator uses his experience, skill and competency to determine the right opportunity to introduce the design thinking process. Certain settings, such as working group, can provide the facilitator with such an opportunity.

On the country team, the DCM could be the facilitator since the DCM often leads various working groups within the country team. The facilitator would receive guidance from the sponsor/convener to use the design thinking process to develop frequent, low-fidelity options (prototypes) in response to the design challenge. The facilitator would also assist the sponsor in identifying challenges for which the design thinking process is appropriate. If the DCM is not comfortable facilitating the design thinking process, then an independent facilitator will be necessary.

Facilitation is critical during all phases of the design thinking process. Facilitators ensure success is measurable and demonstrable. Undertaking the design thinking process without a facilitator is unwise and can result in an organization wasting limited resources and busying itself with meaningless tasks. To avoid this situation, the facilitator works with the sponsor/convener to determine the most appropriate way of tackling the design challenge.

The facilitator also works with the sponsor/convener to develop a clear and concise design brief to guide the design team's efforts. For example, in the midst of a crisis, the design team may not have time to conduct intensive field research, and the facilitator may modify the process to focus on analyzing existing data to develop contextual understanding, rapidly generate ideas, and provide options to the COM without extensive testing and refinement. However, if time and resources are less limiting, the design team can engage more deeply through field observations, stakeholder input, and prototype testing. When the sponsor/convener approves the design brief, the facilitator communicates the brief to the core design team and begins the design thinking process.

The facilitator plays a crucial role in assisting the other members of the design team, locating space, and identifying opportunities to demonstrate elements of the design thinking process. It is important to explain to other members of the country team where and how they can contribute to the success of the design thinking process by explaining their role within the design team.

4. Core Design Team

The design thinking process functions best when a facilitator, and a core group of three to eight individuals, guides the process. Ideally, several members of the core design team have experience facilitating the design thinking process. This knowledge is useful in identifying and recruiting additional participants. A SOF augmentation team with knowledge and practical experience with the design thinking process comprises an ideal core design team.

Active participation is the best way to learn the design thinking process. Therefore, once the members of the SOF augmentation team understand the foundational tenants of the design thinking process presented Chapter II, they will benefit from frequent practical experience participating in, and facilitating, design workshops. The more a SOF augmentation team can participate in, and facilitate, design-thinking workshops together, the better prepared it will be to support similar workshops with the country team.

Inclusion of the facilitator within the core design team improves the core design team's process fluency and understanding of sponsor/convener guidance. The facilitator combines knowledge of the design thinking process with understanding of the sponsor's requirements to guide the larger design team through the process.

5. Stakeholders and Potential Users

When possible, the design team includes stakeholders and potential users in design thinking process. Their early and frequent inclusion gives them opportunities to voice concerns and desires and thus expand the design team's understanding of a particular problem. Additionally, because stakeholders will ultimately implement the prototype produced during the design thinking process, their feedback to the design team is valuable in assessing the feasibility or viability of prospective prototypes.

B. THE DESIGN SPACE

The purpose of a design space is to provide the design team with a location in which to work during the design thinking process. Ideally, the design team will have a dedicated space to work. However, space is at a premium in many embassies. Often a design team will have to earn design space within the embassy by demonstrating value to the success of the mission. Until a sponsor/convener recognizes the value of design thinking, it is unlikely the design team will have a dedicated design space. Nevertheless, ad hoc design space, although not ideal, provides a common space for participants to interact, share ideas, and develop prototypes.

C. NARRATIVE: SOF AUGMENTATION TEAM USE OF DESIGN THINKING TO PREPARE FOR A COUNTRY TEAM ASSIGNMENT

This fictional narrative provides a glimpse into what right might look like when preparing for the complex environment of an embassy country team using design thinking. Recall from the narrative that began this project, that the SOF team leader was ill-prepared for the assignment to a country team. This narrative describes how a prepared SOF leader could apply the previously mentioned guidelines to prepare for and execute an assignment to a country team. It is not an all-encompassing checklist. It will provide some examples, based on our study and experience, of things to do in preparation for a SOF embassy deployment, preparation that the SOF team in the first narrative in Chapter I was either unaware of or unable to conduct.

Prudent planning and preparation is important to maximizing the probability of success. For example, if a team only has a couple of weeks advance notice of a pending deployment, it is unlikely the team will have time to conduct much additional training. The team must therefore rely on the strength and value of prior training. A team that does not take the time to train and prepare to operate as part of a country team prior to receiving orders to a USEMB is unlikely to develop the requisite knowledge, skills and competencies after the fact. This is not to say the team will fail, but it does emphasize the importance of preparation in improving the team's probability of success.

The following fictional scenario demonstrates the benefits of utilizing design thinking to approach a new, complex counter-narcotics (CN) mission to Country A.

1. Planning

You are a SOF detachment commander just returned from a DTAAC deployment. Your battalion commander (BC) (sponsor) summons you to his office and informs you that you (facilitator) will lead a CN mission to Country A. The battalion commander informs you that the battalion leadership has no institutional CN expertise regarding Country A, but some of the senior non-commissioned officers (NCO) have experience working CN missions in neighboring countries. You ask him for additional guidance, but he admits he does not know much about the mission. The commander does know the

mission is of utmost importance, and the high profile nature has the close interest of the group commander and his bosses. Based on the “no fail” nature of the mission, you ask permission to personally select team members and possibly support personnel. The battalion commander agrees to review your proposed personnel list, but he admits there may be a personnel cap (constraint), so you manage your expectations. Although it may take some time to get SecDef’s signature on the deployment order (DEPORD), the BC asks to hear your proposal in three weeks. When the day started, you were thinking about an upcoming vacation and now you are planning one of the most complex missions of your career. As you walk back to your team room, you realize this is why you joined Special Forces. You are elated with your latest challenge.

2. Organizing

Once you are back in your team room, you call in your team sergeant and give him a quick dump of the meeting with the BC. You remember your exposure to design thinking and you want to get started capturing ideas. You start to make a list of things you need to do, and you both immediately start to discuss the team’s composition. At this point, you know the strengths and weaknesses of your entire team; you know the character and demeanor of some of your team members make them great combat soldiers. Conversely, some of these same characteristics might produce a liability in an embassy environment. You and the team sergeant create a by-name order of merit list (OML) for this mission, knowing you may have to cut a few teammates at the expense of some support personnel.

Next, you and the team sergeant make a list of documents you need to start reviewing promptly. These documents will drive the next steps in the discover process. You start with the current DOD authorities for Country A (if there are any), and you ask the battalion staff for copies of the DEPORD. Your parallel effort is looking for other documents of equal importance to the COM, namely the DoS’s Mission Resource Request for Country A, the Integrated Country Strategy and the Presidential Letter of Instruction for the U.S. ambassador to Country A. These three DoS documents detail the priorities of that embassy, and they give you a chance to nest your plan with the

ambassador's plan. Reviewing these documents is a great start, but you soon realize you need to sit down with the professionals from all the USG agencies involved. Therefore, you organize a list of visits you will need to make in the NCR.

To synchronize your plan with the ambassador's, you realize you first need to sit down with the Country A regional desk at the DOs. From the DoS, you move to CIA headquarters (HQ), and meet with the division responsible for Country A. During the course of this meeting, they intimate certain intelligence gaps you can assist with during your deployment. After these meetings, DoS and CIA officers send cables to their colleagues at the U.S. embassy in Country A to let them know about your visit and to assure them that your team is willing to partner in any way you can, which demonstrates your team's willingness to work with partner agencies, and it has a tremendous impact on your future operations when you arrive on the ground in the embassy. Based on the CN mission nexus, you also reach out to the U.S. LEAs working in Country A.

The first LEA meeting is with the DEA's Special Operations Division, which has been supporting CN missions in Country A for the last 20 years. You quickly realize there is a dearth of CN knowledge and expertise in your own group, as you listen to the nuanced accounts of numerous special agents who have been on the ground in Country A. You astutely ask the DEA agents if they would be willing to come to your home station for a couple of days to instruct your team on the intricacies of drug laboratories and other CN tasks. They readily accept, and you work it through the USSOCOM DEA LNO in Tampa, FL.

After you finish with the DEA you meet with the FBI and the U.S. Marshals (USMS). You are experienced working with the FBI in Afghanistan, but rapidly realize they have a much different role in this mission. However, you discover both agencies have deep historical ties with Country A's federal police force and they provide you with points of contact. Although the FBI and USMS are not fixated on CN efforts in Country A, they often work with the DEA to apprehend criminals in the drug cartels. Additionally, some of the FBI and USMS agents travel to Country A regularly. From these experienced agents you learn valuable atmospheric about key leaders in the U.S. embassy because of the agent's daily interactions with these key leaders in the past.

Throughout the course of several days of meetings, you learn the DCM is the key member of the country team, since she leads numerous working groups on behalf of the ambassador, and she possesses extensive regional expertise. However, the DCM has little experience in design thinking, so you anticipate that should a design challenge emerge you will likely assume the role of the facilitator. These environmental facts prove to be as important as any other facts you gather during your visit to the NCR.

Once you have completed gathering facts in the NCR, you travel to the TSOC to review your meetings, and you speak with several staff members who have previously served in Country A. You also meet with members of the J35 staff who advise you which partner nation force you will work with during this mission. They provide you with some read ahead material, which you promptly send back to your team to review. While at the TSOC you discover there has not been a USSOF team on the ground in Country A for the last five years due to combat rotations. You have already learned from your other interactions that the previous SOF teams had good reputations in the embassy, but you will basically have to start from scratch because of the lengthy gap. Based on this knowledge, you reach out to the DATT's Office and start communicating with the SDO in Country A to demonstrate your acknowledgement of his seniority in the embassy, and it also lets him know your plan. The SDO appreciates your transparency and promises to provide your team his full support. He also provides you with a liaison officer point of contact (POC) in his office who can handle your team's specific needs. The use of design thinking, along with your efforts to expand your collaborative network, is starting to pay dividends with your team.

3. Preparation and Training

Upon returning to your home station, you and your team develop a pre-deployment preparation plan. You know that success comes from the interdisciplinary nature of your teammates' experiences, and you bring each of their backgrounds to bear in looking at this mission. During the course of your travels, you identify training necessary for your team to be successful. You discover while visiting the TSOC that the Joint Special Operations University (JSOU) is teaching a week long Special Operations

Forces Interagency Collaboration Course. You sign up select members of your team for this course, and then you schedule additional focused military training, which includes shooting, defensive driving, and concentrated medical training. Meanwhile, two of your team members speak the native language, and they conduct language training to increase their proficiency.

While visiting CIA and DoS, the desk officers recommended some books for the team to read prior to deployment. In their opinions, this literature will help the team understand the culture and the personalities they will be working with from the partner nation. The DEA also offers a reading list, which covers some specific regional CN operations and historical vignettes. The SDO and TSOC also provide unclassified reading suggestions. You start to be inundated with reading and realize you have not even started to look at the classified information. You request and receive an intelligence analyst from the Battalion Intelligence Section, and the analyst starts to review classified material and build an intelligence briefing. You then start to parse out the unclassified reading to the different members of the team to cross-level information efficiently to give you time to work on your briefing to the BC. You and your team sergeant then create the final OML for the trip, which includes an intelligence analyst and a logistician. You plan to request both during the BC's briefing.

The briefing to the BC goes well. He says he has already received a phone call from his buddy at the TSOC stating they were impressed by the depth and breadth of collaboration that occurred across the interagency before and during your visit to the TSOC. This collaboration makes the commander happy and sets a good tone for the rest of the briefing. The BC approves of your training plan for the partner nation, but he received confirmation that a personnel cap, in fact, is in effect for the mission. He approves your request for an intelligence analyst and logistician, but directs you to leave two team members stateside. As you have already created the OML, you have identified two soldiers who can attend career progressing schools while the rest of the team is deployed. Once again, your prudent planning has kept the mission on track. Your final request for the BC is to conduct a site survey at the embassy. Two days later, the BC

informs you the site survey has been approved by higher. You are ready for the next phase.

4. Setting the Stage

Before your site survey, you remembered the informal advice you received during your visits to the NCR about the center of gravity in the embassy resting with the DCM. You ensure that your liaison in the Defense Attaché's Office (DAO) schedules a meeting with the DCM during your visit. Your first visit in the embassy is with your liaison in the DAO. She also shows you the workspace you will occupy during your mission. It is small, but workable, and you are thankful to have a dedicated office. You take measurements and pictures so you can design the optimal workspace at home station and maximize your collaborative space.

In the course of the site survey, you meet with the SDO, the DEA RAC, CIA officers, DoS officers, the LEGAT, the partner nation force commander, and the DCM. All your meetings go as planned before you sit down with the DCM. You learn immediately that the gouge you received about the DCM was spot on, and she appreciates you providing a formal briefing regarding your team's mission. She proceeds to schedule an afterhours meeting with the COM that day. Based on their previous assignments in the region, the COM and DCM do not have much experience with the DOD in general, and SOF, in specific. They each have some pointed questions for you during the exchange regarding your interaction with the partner nation's military. Since you met with the DoS's regional desk for Country A, you are prepared for this. You know to address their concerns immediately. Consequently, you are able to assuage their concerns and address several inaccurate stereotypes. Furthermore, you have rehearsed talking points based on the COM's Mission Resource Request, which addresses ways you can add value to the COM's strategic plan in Country A, which impresses both the COM and the DCM, and they both pledge their full support to your team's mission. After leaving the meeting, the DCM tells you to come to her if you have any problems, and she says she looks forward to the start of your mission. At the end of each day, you send a

SITREP back to your BC and your team. Each SITREP highlights your day's activities and notes recommended changes in your plan based on the day's interactions.

When you return to the United States, you finalize your team composition and your final equipment list. You have done your homework, so your team OML does not change at this point. Since you took pictures and measurements, you are able to rope off space in the battalion area and set up a model of your space, which enables you to buy specific office equipment to stack radios, store supplies, and reduce clutter. The fact that you measured the space intrigues members of the DAO, and it opens the door to expose them to the value of design thinking and design space during your deployment. With an intelligence analyst and logistician already embedded in the team, your deployment proceeds with few issues and you meet each benchmark on time.

As you start the mission, you begin to observe the team composition to ensure it is right for the mission. After two weeks, you notice arguments between the intelligence analyst and the logistician, and you realize the friction is in front of members of the DAO staff. You remember part of your design thinking training is to readdress the situation and the team composition constantly. Since a very helpful and capable logistician is available in the DAO, you send your team's logistician back to home station until it is time to redeploy, which ends the office friction and makes more room in your office. The mission turns out to be a tremendous success, because the effort to collaborate made potential enemies your allies, and you knew where and when to add value to our interagency partner's efforts.

D. SOF AUGMENTATION TEAM INTRODUCTION OF DESIGN THINKING TO THE COUNTRY TEAM

1. Identifying the Design Challenge

Once you hit the ground in Country A, you meet with the same key leaders in the country team that you did during the site survey, to let them know you are commencing operations. You also inform them you will outbrief each of them before your team redeploy to the United States. Most of these leaders appreciate hearing about this follow up, which they say they rarely receive. The DCM invites you to attend her weekly CN

working group. You are hopeful this meeting will provide much needed insight into current CN efforts, but you soon realize these meetings do not accomplish much. You listen and observe for several weeks before an opportunity to provide meaningful support to the COM's initiatives presents itself. The COM has tasked the DCM with updating the mission's CN strategy for Country A. When the DCM announces this new initiative, a collective sigh is heard in the room, and several members of the assembled country team roll their eyes. However, you see an opportunity and you quickly volunteer to draft the document for the DCM, with the assistance of the other members of the CN working group. She jumps on this and seems pleased you have taken ownership of the CN strategy document.

Development of the USEMB CN strategy document provides an opportunity to ensure your team can provide support the COM. It also affords your team the opportunity to introduce yourself and allocate resources to assist other members of the working group.

2. Discovery

In the hallway after the meeting, one of your friends pulls you aside and asks you to have a cup of coffee with him in the cafeteria. During the talk over coffee, he confides he believes the CN strategy document is worthless, and that is why no one in the working group volunteered to help with it. Most agencies believe it is worthless and carries little value. You remember hearing of another SOF augmentation team who was very successful in adding value to a CT strategy document in this manner, so you promise your interagency colleague you will ensure the other members of the working group can make their position heard if they work with you. You immediately ask for your friend's support, and he grudgingly agrees to help you. You move quickly back to your office to gather facts and commence planning.

You assemble a design team composed of key influential members of the CN working group. You ask representatives of the DoS's Pol/Mil, DEA, FBI, CIA, Department of Justice, USMS, and the DAO's to be a part of your team. These

professionals are all deep experts in their field, and they collectively create an interdisciplinary team ideal for this task.

You have already met with your team in your DAO spaces to prepare for your first meeting with the CN working group. Once the meeting starts, the excuses are legion why producing a CN strategy document is worthless. You listen to a litany of complaints and address prevailing concerns. You remind everyone you will be providing weekly updates to the DCM on the documents progress, and the group can drive change if you work together. As you scan the room, you realize the group has assumed informal leadership roles as the more senior members sit at the head of the table. You fear this will preclude true collaboration, and you move swiftly to break up this dynamic before the first meeting is over.

3. Ideate

You decide to get everyone on their feet and up to the whiteboard you dragged from your spaces into the meeting room. Once the team members are at the whiteboard, you facilitate a brainstorming session. Through word association, you ask for their thoughts about this document and how it could provide value to the mission. Quickly, you realize that once you get past the rough exteriors, each team member genuinely believes a strong CN strategy would benefit the United States and Country A.

You continue to elicit input from each agency comprising your team, and you all realize several areas of concern overlap for each agency. You remember to generate small wins and then use the momentum of the small wins to move to creating large-scale victories. Therefore, you focus your initial efforts on gaining consensus in several areas and the team builds from there. You highlight three areas that seem to cross-agency boundaries: sharing intelligence of value in the CN working group, consolidating resources in the country team, and working eradication efforts with the partner nation forces. This result is great for you, because your SOF augmentation team can assist in all three areas. Word is spreading around the embassy that these meetings are not the average working group, and your colleagues hear work is being accomplished.

The team departs after the first couple of meetings with a more positive attitude, and you realize the working group size has grown. It is time to build a new design space. You saw this coming and had your unit send you some additional equipment to outfit a design space in the embassy without having to use any other agency's limited resources. The working group wants to focus on the three areas stated above, and each agency decides it is time to move forward and meet with their partner nation counterparts to gain their input and concurrence. At each of the DCM's weekly CN working group meetings, you brief the results of your CN strategy working group, and she is pleased with the consensus and progress gained in such a short time. You are excited about the progress, but you know you have to continue pushing the group to maintain the momentum.

4. Prototype

Throughout the course of the next couple of weeks, the group continues to work on strategies for combating illicit narcotics in Country A. In parallel, you are also conducting regular updates to your higher HQs and the TSOC on the working group's progress and how your SOF augmentation team's plan is nested within the COM's Country A CN strategy. Your command is also providing mentorship and guidance as you consistently keep them apprised of your progress. One seasoned SOF officer, with multiple deployments to Afghanistan, advises you to propose a comprehensive strategy to tackle intelligence sharing, resource pooling, and eradication, but he continues to say you should scope it down to just one province initially. This recommendation allows you to quickly adjust your prototype and constantly make changes if needed. After careful consideration, you believe he is right and you pitch this concept at your next working group.

The assembled team of professionals has really started to get behind the group's work, and after some discussion, they agree to focus on one province, if, that is, they can get concurrence from the partner nation government. In the ensuing weeks, almost every agency gets support from their partner nation counterparts, and you believe it is time to present your plan to the DCM. You brief the DCM on this plan, and after several specific questions, she approves it. She then tells you to privately brief the Country A CN strategy

to the COM with her the next day. The briefing goes well, and the COM personally agrees to work to gain the support of Country A's president. The next day, you brief the plan to the DCM's CN working group, and the COM approves the plan later in the week.

5. Implementation

The mission resulted in tremendous success. Although success has many causes, your effort to collaborate was no small part. You reduced potential competition with your colleagues and you knew where and when to add value to this country team and support the mission's efforts.

Although this scenario is fictional, we can all draw lessons from the careful planning and preparation made by the team. Although no one will ever be able to plan for every single contingency, it is important for SOF leaders to understand it is necessary to attempt to prepare junior SOF leaders for deployments to such amorphous embassy environments.

VII. CONCLUSION

Creative, adaptive, and agile leaders are vital to overcoming the challenges of operating in unceasingly complex environments. Military and civilian leaders alike recognize the value of innovative thinkers to their organization and proclaim the need for a culture of creativity and collaboration. Selection emphasis on adaptation and innovation make SOF leaders well suited to fulfill this role. A well-led, multidisciplinary team that continually pursues a deeper understanding of the dynamics of the country team, and rapidly prototypes methods to cope with those challenges, can immediately improve interagency collaboration within existing manning, appropriations, and authorities. SOF leaders who adhere to a few simple guidelines are well positioned to facilitate design thinking, improve collaboration within the country team, and produce more innovative options for the COM.

Our experience with USEMB country teams, and other interagency environments, convinced us of the power of design thinking to build collaborative culture in a remarkably short time. SOF augmentation teams, trained and experienced in design thinking, can lead this effort. As a cohesive subgroup, a SOF augmentation team is highly capable of purposefully building and maintaining the trust within a country team necessary to facilitate collaborative problem solving.

Adhering to the guidelines above can provide a foundation for successful country team collaboration. However, this methodology does not guarantee success and is not suitable for all problems. It augments, rather than replaces, existing problem solving approaches. If a SOF augmentation team does not have the advantage of conducting collective pre-mission training or visiting regional desks, it does not mean these teams will fail. Conversely, even if a SOF augmentation team adheres to every guideline discussed in the project, it may not succeed in accomplishing its objective. Sometimes, despite the efforts of the SOF augmentation team, negative influences will preclude successful collaboration in a country team.

Interagency collaboration challenges are not the DOD's alone. It is not possible to just stop and wait for legislated solutions or grand organizational restructuring to remove the blocks and challenges to country team collaboration. In the country team environment, each agency has a unique responsibility to collaborate with other agencies, but SOF leaders can set the example by demonstrating ways to collaborate with interagency colleagues. Collaboration has to start somewhere. Design thinking is a natural and neutral methodology to begin that effort. We believe the design thinking process is an immediately implementable and promising alternative to improving country team collaboration.

We recommend that SOF augmentation teams gain exposure to design thinking prior to assignment to a country team naturally leads to the question, how might SOF augmentation teams gain a comprehensive understanding of the design thinking process?

A. IMPLEMENTATION

As a design team, we quickly understood that learning about design thinking from books was inadequate. We actively sought practical exposure with the process and associated techniques. Personal interaction and self-study informed our understanding of the design thinking process, but Dr. Nancy Roberts, fellows at the Stanford d.School, and partners from the design consultancy, IDEO, mentored us in the design thinking process. In total, we dedicated 12 credit hours of our NPS curriculum learning about the process. In addition, we traveled to the IDEO offices in Palo Alto, CA five times to meet with design thinking experts to discuss this project. Their insights and candor were invaluable to our learning.

We practiced and developed our ability to facilitate the design thinking process by holding two design workshops on the NPS campus. Additionally, we applied the design thinking to our visits to various organizations at Dam Neck, VA, Fort Bragg, NC, McDill AFB, FL and within the NCR. We also used design thinking during our visit to a TSOC and USEMB to observe a SOF augmentation team in action. Lastly, we facilitated a workshop with the SOF augmentation team to ask how the team might improve its collaboration with the other members of the country team.

More experimentation using design thinking within the country team will improve understanding of its advantages and disadvantages in comparison to other forms of interagency cooperation. Ideally, this would involve other SOF augmentation teams.

We offer one caveat. We are novices facilitating the design thinking process. We recognize that not every SOF operator will have the same opportunities we had to prepare to operate as part of the country team. It is difficult to ascertain, at this juncture, how much advance preparation and experience is necessary for SOF augmentation teams to achieve proficiency in facilitating the design thinking process. Developing a program to educate and train SOF personnel in the design thinking process requires additional study.

B. NEXT STEPS

We are unaware of any standardized program focused on educating and preparing military and interagency professionals to facilitate the design thinking process. Private firms like IDEO could potentially take on this task, but this would require additional resourcing. SOCOM could establish a course in design thinking mandatory for all SOF augmentation team members similar in concept to the recent establishment of the SOF Interagency Collaboration Course at the JSOU in Tampa, FL. We began to explore these ideas during the ideation phase of this project, but determined that developing and implementing such a program would require experienced design thinking facilitators that do not yet exist within the USSOCOM formation.

To educate more SOF leaders in design thinking, and improve their ability to facilitate the process, SOCOM could establish a Design Thinking Center at NPS. The education we received at NPS was essential to building our knowledge, skill, and competency in facilitating design thinking workshops. A Design Thinking Center at NPS could advance knowledge of the design thinking process and provide design thinking workshop facilitation experience to the SOF community at large. However, this presumes a solution without fully understanding the context of this challenge. Consequently, as an interim next step, follow on design projects at NPS could consider how best to train and educate SOF leaders in design thinking.

Finally, education in design thinking is valuable to other members of the country team. For instance, Ambassador Yamamoto of the Foreign Service Institute recognized the value in educating promising diplomats and young ambassadors within the DoS in the same problem solving approaches as used by DOD. Introducing design thinking into the DoS ambassador education pipeline has much the same value as it does with the SOF community.

The suggestions in this project are only the beginning. We offer more suggestions and ideas in Appendix A from which we developed through our own application of the design thinking process. Design thinking offers a practical and immediately implementable approach to addressing today's conflicts requiring a more collaborative, whole of government, effort. We endorse its introduction to the SOF community and the country team. We hope our guidance and suggestions establish the foundation for improved country team collaboration.

APPENDIX A. ADDITIONAL IDEAS TO IMPROVE COUNTRY TEAM COLLABORATION

During the course of the authors' field research and personal interactions, potential users and leaders at all levels expressed a wide range of ideas for improving collaborative problem solving within the country team.⁹ Synthesis of information collected during field observations and feedback from workshop participants indicated four broad areas to improve collaborative problem solving capacity. These ideas fell into four general groups: communication, cultural understanding, education, and legislation. We include them here even though some are beyond existing manning, authorities, and appropriations.

A. COMMUNICATION

The country team voiced unanimous agreement concerning the need to improve communications. Enhanced communication provides better access to useful and varied information. To the degree with which the country team has access to more information, they have more opportunities to solve complex problems.

1. Use Standardized Information Communications Technology

The reasoning behind this idea is that if every member of country team uses a standard information communications technology (ICT), or at least, an interoperable system, it would reduce technological barriers to communication. Agencies and individuals working within the embassy use an array of ICT systems with varying degrees of interoperability and compatibility, which creates barriers to communication across organizational boundaries. The resulting compartmentalization results in reduced information and idea sharing. Consequently, several ideas from members of the interagency community centered on selecting one common system, or at least, ensuring compatibility among the systems of each separate agency. This idea was not viable because this would take a national policy change, and is outside the scope of this project.

⁹ Referred to from Chapter III section on Design Thinking Initiation and in the Conclusion as additional ideas that we generated using design thinking discovery and ideation.

2. Develop a Common Terminology

If every member of the country team used the same terminology, and ascribed the same meaning to organizational activities, it would reduce miscommunication. The use of indiscriminate jargon, ambiguous terminology, or polarizing terms to explain initiatives and activities, can have significantly affect collaboration. Different individuals may ascribe profoundly different meanings to the same term based on experience and perspective. For example, the term *operation* can mean very different things to a military officer, an FBI special agent, and to a civilian surgeon. Furthermore, the overuse of acronyms can result in confusion that inhibits the sharing of information necessary for effective communication. Mitigating the effects of such miscommunication requires significant situational awareness and deliberate effort.

Terminology is a function of organizational culture and can be a significant barrier to communication with individuals outside a particular organization, which presents a particular problem with civil military relationships. Military culture encourages the use of acronyms and jargon to convey information quickly and concisely, which works well during military operations. However, its use can lead to communications issues when DOD personnel interact with other agencies unfamiliar with particular terms and jargon. SOF personnel must make every effort to understand how the other members of the country team communicate and follow suit.

3. Develop a Standard Method for Sharing Information

The intent of a standard method for sharing information is to reduce miscommunication by presenting information in a familiar and understandable format. Ubiquitous methods of communicating within one agency often confound and irritate other agencies. A general perception is that the DOD overly relies on PowerPoint to represent all forms of data. Other agencies unequivocally discourage PowerPoint in favor of memoranda, executive summaries, or white papers, which is largely the result of agency cultures and the reporting preferences of supervisors.

4. Create an External Advisory Element

This external advisory element, or “Grey Beard” team, would function as an emergency consultancy group to facilitate the country team’s collaborative problem solving process if other methods fail. This team stems from the Benghazi incident, in which many offers of resources and capability went unheeded until it was too late. Design thinking could influence the sort of modular and scalable interdisciplinary team.

A team of qualified and experienced professionals on call could help address issues that emerge within a country team and should include retired embassy officials (e.g., former ambassadors, SDOs, COS, and LEGATs). The SOF team could contact them and explain the particular issue they were having with the interagency partner and the advisory team could help to get the country team problem solving process back on track. If these experienced professionals’ advice did not work, they could be on call to fly to the country and work with the team on the ground. If that did not work, they could also make the recommendation to replace members of the SOF team. Unfortunately, as these highly capable individuals would have to be hired and then resourced, it falls outside of current manning, authorities and authorizations at SOCOM to effect this change.

B. CULTURAL UNDERSTANDING

Understanding the objectives of other agencies facilitates improved country team rapport, trust, and support for various initiatives in country. SOF leaders need to take the initiative to understand their environment and seek ways to prevent communication breakdowns. For example, too often, DOD leaders attempt to communicate in a directive manner that country team colleagues perceive as characteristic of a superior addressing a subordinate rather than a discussion among peers. Although military culture values a directive style of communication of clearly articulated deadlines and requirements, this style of communication can result in significant animosity among country team colleagues working with the SOF augmentation team.

1. Increase Participation in Interagency Internship Programs

The NCR has numerous interagency internships with all SOF agencies so that individuals could work with an embassy country team. This participation needs must be a career enhancing opportunity for SOF leaders, and should empower future leaders with interagency knowledge they would not otherwise learn before deploying. These respective agencies also will benefit from the gifted, experienced leaders provided to the other agencies. This educational advantage of the internship will be reciprocal.

2. Increase the Number of Foreign Area Officers with SOF Background

SOCOM also could invest more officers in the foreign area officer (FAO) military attaché program to allow SOF leaders a way to fall into an already existing program set up to receive, prepare, and deploy military attachés across the globe in support of GCC objectives. The FAO branch is always looking for more SOF leaders to join their ranks. Additionally, an established program exists to prepare these leaders to represent the DOD in USEMB. This would provide the country team with resident, persistent SOF expertise. However, this would take key personnel out of the formation of an already over-tasked SOCOM, and SOCOM would relinquish control of these individuals to the Defense Intelligence Agency. The DIA could task the SOF FAOs with non-SOF missions, and thus eliminate the ability of a TSOC or USSOCOM to have responsive SOF personnel serving full time in the embassies.

C. EDUCATION

Leaders require an education and training before a deployment to work within an embassy. Although methods vary, sufficient education likely requires a mix of formal instruction and informal experiences with interagency colleagues prior to their arrival in the country team. Improved education provides an important foundation to develop enhanced collaborative capabilities.

1. Establish a SOF Education Course

With the DoS's leadership interested in improving interagency collaboration with the DOD, one recommendation is to establish a SOF education course at the DoS's

Foreign Service Institute (FSI). This course could range from one week to a month. It could cover topics, such as area specific briefings, DoS authorities, COM documents, the roles of individuals sections in an embassy, visits/briefings by regional desks at the DoS, and briefings on the DoS culture to provide DoS leaders with a venue to instruct SOF leaders on topics of their choosing. These courses could utilize foreign service instructors and allow informal interactions between SOF leaders and career FSO. Additionally, there are currently DOD internships available at the DoS, through the Command and General Staff College. Budget permitting, SOF needs to ensure it is taking advantage of investing in this internship.

2. Add Additional Courses to Existing Education Programs

Training SOF leaders for dealing with the interagency environment could vary based on the officer's career path. All officers should have, at a minimum, a block of instruction during each service's intermediate level education (ILE). This block could discuss each agency, and how it operates. Anytime U.S. military leaders, of any rank interact with interagency partners, the military leaders must be aware of a U.S. partner's optic. Ideally, career military officers could attend advanced civil schooling to study foreign policy or to attend a fellowship at some of the key USG agencies. Knowledge of other agencies is essential to understanding not only how the agencies work, but also how SOF can work with them to support long term U.S. policy objectives. Quite simply, every agency in the USG should be working toward this goal. Current fiscal restraints mean training and education usually take the first budget cuts, but this is a worthy goal nonetheless.

3. Establish an Interagency Center of Excellence

Another way to improve interagency education is to create an interagency center of excellence in the NCR to allow the top performers of each agency's mid-level leader population to participate in a shared curriculum. Most members of the interagency community have a significant presence in the NCR, and a center of excellence would expose personnel to members of other agencies at a more junior level.

The staff and instructors would be comprised of experienced interagency professionals, who could instruct on behalf of their agency to allow agencies to represent their own interests. Thus, a DOD instructor is teaching other DOD professionals and other agency members are instructing their own personnel. This forum provides every agency a platform to educate and address misperceptions regarding it. Arguably, the biggest benefit would come from the personal interaction of the mid-level leaders who are the students in the courses. Allowing different interagency colleagues to team up on projects will greatly increase collaboration for future generations in each agency. Such a bold step would take exceptionable support from the leadership of each agency, and it would only work if every other USG agency supported this effort with their best instructors and students. Outside of a congressional mandate, this course of action is not viable.

4. Imitate Other Interagency Successes

Our visit to PANEX South Strike Force, an FBI/DEA led counter-drug interagency task force, provided insights into effective problem solving. PANEX stands out as one of the truly successful interagency collaborations we witnessed within the USG. The genesis, and enduring success, of PANEX is the result of informal relationships that span organizational seams. These relationships were not mandated, legislated, or otherwise, artificially imposed. The network created by the founders of PANEX relied on trust established through a combination of hard work and fortuitous start-up conditions. A scrupulous devotion to transparency, information sharing, and mutual respect resulted in a collaborative team environment that serves as an example for other interagency problem-solving efforts.

PANEX includes members of the FBI, DEA, DHS, the DOD, the Coast Guard, JIATF-South, the Attorney General's Office and the Department of Treasury in the same spaces. They do not allow any agency to take individual credit for successes or failures. Most importantly, their numbers do not lie and PANEX has been so successful that each agency's leadership provides them unusual latitude to conduct their operations because of

their ability to do more with less. In a period of shrinking resources, this accomplishment is particularly notable.

We learned very specific details about how the PANEX team holds each agent/analyst accountable for leaving their agency at the door and staying focused on the mission. A very important component of this success was that they built this selfless climate from the beginning and they used peer pressure to get everyone into “one team, one fight” mindset. Each contributing organization’s HQ eventually accepted its efforts at the ground level as its successes mounted, which is a critical lesson for SOF when looking to start new relationships with U.S. embassy country teams across the globe.

D. LEGISLATION

Legislation mandating agencies collaboration is a common proposal for improving interagency effectiveness. Mark I. Thompson, Deputy Coordinator for Operations, DoS Counterterrorism Bureau, explains that Congress mandated the military become joint in the aftermath of the 1980 failed Iran hostage rescue attempt, through the Goldwater-Nichols Act of 1986. However, he does not foresee such legislation as a feasible way to compel interagency collaboration (M. Thompson, personal communication, January 27, 2014). The political issues, as well as the policy ambiguity that many leaders embrace, will not allow statutory efforts to prevail. Consequently, it is essential to establish rapport and trusted informal networks across agencies to be effective.

Although interagency legislation is highly unlikely, Congress could force agencies to create advisory teams or commissions to improve interagency collaboration. Shrinking budgets and resources provide Congress with a great opportunity to study, and ultimately, streamline interagency processes. Utilizing the CIA, DoS, FBI, DOD and other agency senior executives, working together, to study and recommend approvals for improving interagency collaboration could provide the needed impetus to collaborate more effectively at the country team level. If the USG does not look at interagency collaboration, the country risks agencies becoming more insular as shrinking resources force agencies to fight harder to earn credit for their agency’s workload. A Tiger Team or

commission comprised of interagency senior executives could provide them buy-in to the process and clearly articulate each agency's interest to the larger group.

APPENDIX B. COUNTRY TEAM TOPOLOGY¹⁰

Network topography has a significant effect on the character and extent of collaboration within a network. Careful observation of the patterns that exist within a system can offer insight into a network's topography. Networks are complex, multidimensional systems connected through human relationships. As such, they form dynamic "super organisms" not readily reducible to the study of individual entities (Christakis, 2010). When assessing a network to identify opportunities for collaborative problem solving, it is important to determine the prevailing network topography. Knowledge of a network's topography also improves understanding of the network's purpose and efficacy.

The USEMB sociogram (Figure 8) represents a snapshot in time of a country team. It is important to recognize network topology is not stagnant. The structural positions individuals occupy within a network change over time (Balkundi & Kilduff, 2006, p. 427). Regular, and repeated, observations of the relationships that comprise a network, improve understanding of a network's evolution. Most importantly, understanding the dynamic topography of a network facilitates the discovery of cohesive subgroups that are the foundation for collaborative problem solving.

¹⁰ Referred to from Chapter IV, Social Network Analysis.

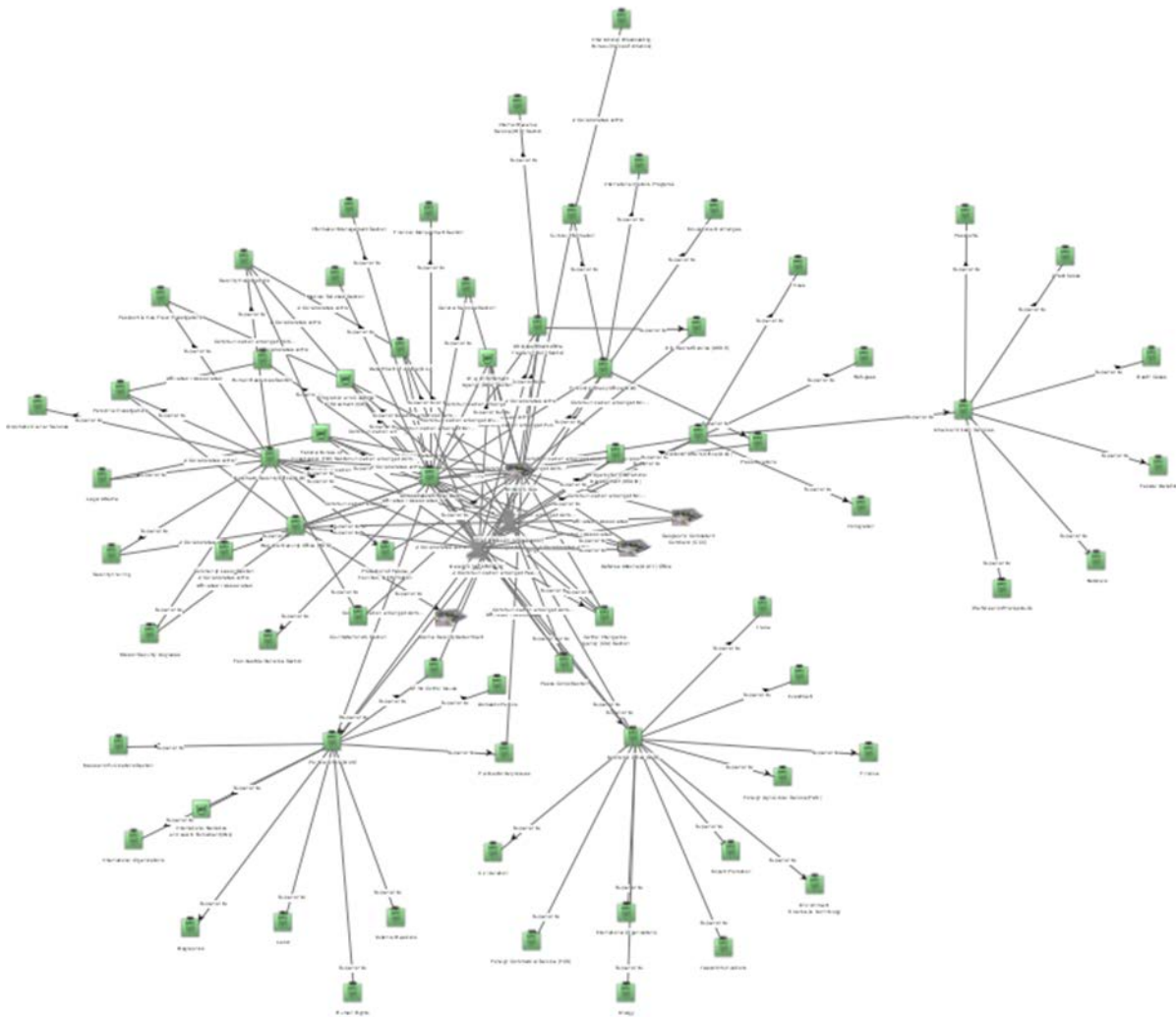


Figure 8. USEMB sociogram

A. TIES

Formal and informal ties connect entities within the USEMB. Sustained social relationships form a network regardless of the formality of specific ties among actors. Formal ties consist of congressionally mandated or other official relationships (e.g., DOD personnel assigned to a diplomatic mission serve under the direction and supervision of the COM (United States Code, 2009). Informal ties consist of friendship and other sustained unofficial inter-organizational communication (e.g., in 2005, the Public Affairs

Officer of the U.S. embassy Tbilisi, Georgia was married to the Political/Economic Officer (Dorman, 2005, p. 29).

The number and strength of ties have a prominent effect on network topology. The USEMB sociogram (Figure 8) includes a number of strong and weak ties. Weak ties typically span gaps between densely interconnected cliques within a social network. Since unity of purpose begins with information sharing, weak ties are vital to surmounting obstacles to intergroup collaboration among cohesive subgroups. A sparse network provides superior information sharing and dissemination (Burt, 1992, p. 65). For this reason, in terms of facilitating collaboration, numerous weak social ties are superior to a few strong connections. It is, therefore, necessary to identify the presence, or more importantly, the absence of weak ties amongst subgroups.

The transitivity of an actor's social ties is another important network topology consideration. Transitivity refers to the extent that actors linked to an individual know each other. Transitivity can vary significantly within a network as some actors tend to introduce and connect their friends and acquaintances, while others tend to keep their connections disconnected (Christakis, 2010). Those actors who intentionally associate their connections with one another strengthen the cohesiveness of their subgroup. A cohesive subgroup is more effective at completing tasks under stressful conditions, but less likely to have access to novel or innovative information.

B. SIZE

Data availability makes determining the size of the USEMB difficult. This study utilized Palantir software and the 2013 USSOCOM ontology to structure data available from open sources, personal communication, and participant observation. This case study analyzed 75 entities. Of those 75 total entities, 65 are governmental organizations, four are law enforcement, four are military, and two are individuals (i.e., COM and DCM) treated as small organizations.

C. STRUCTURE

Network structure is the visual arrangement of entities that comprise a network. The authority ties of USEMB (Figure 9) indicate a hub and spoke structure. The COM is the hub of the diplomatic mission and the country team represents the spokes, which is an expected result from a formal, hierarchical structure. The COM holds the purpose of the network and the country team sets the style. Examination of the USEMB structure indicates the presence of several significant structural holes (e.g., between the Economic Office and the Military Group, or between the Political Office and the Regional Security Office).

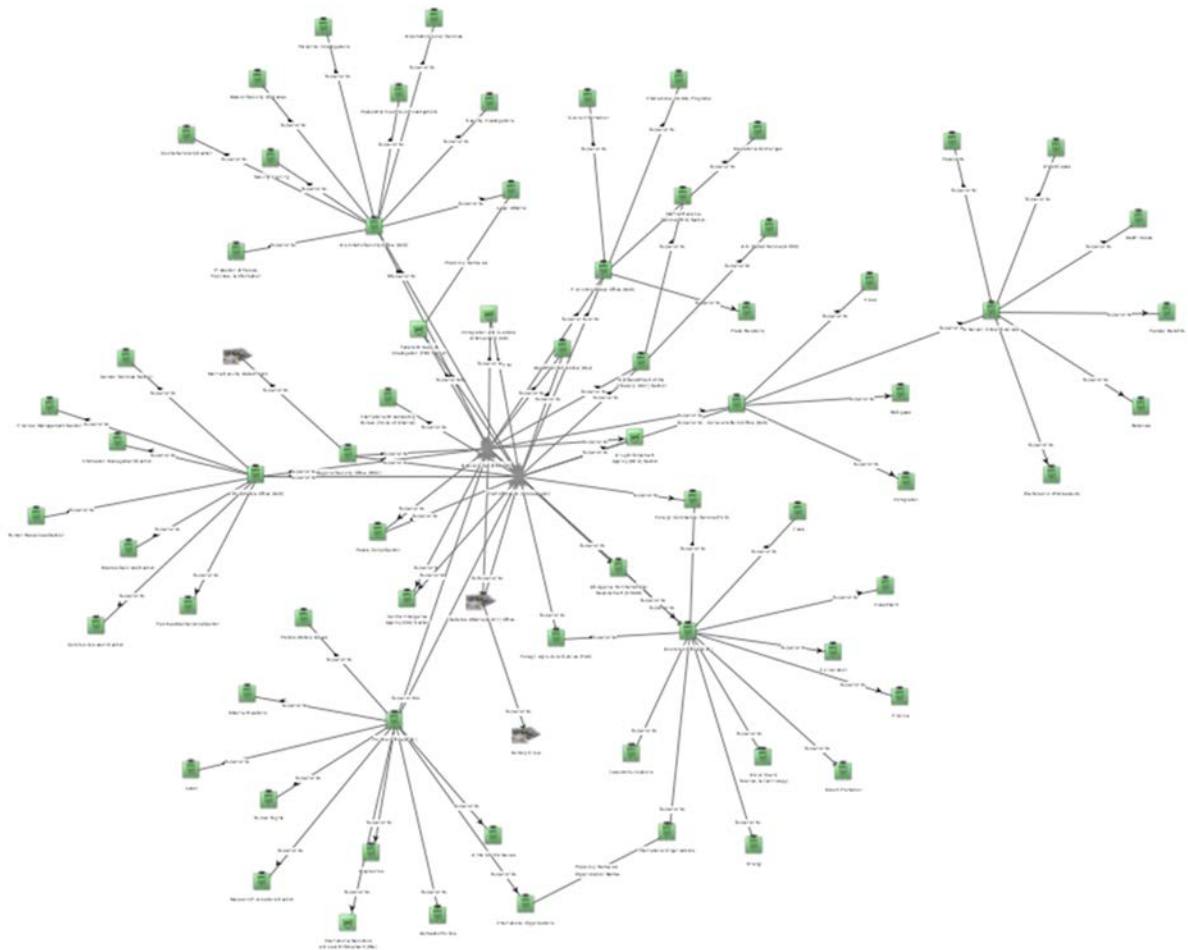


Figure 9. USEMB authority network sociogram (authority ties only)

Collaborative problem solving requires reliable information channels to enable sustained communication. These communication channels rely on brokers and bridging connections to join disparate groups and disseminate information. A divided or fractured network presents numerous prospects for brokers to establish the vital bridging ties indispensable in increasing the density of a network necessary to support collaboration. In a network with substantial structural holes, these conduits may, or may not, form organically. Whether the uninfluenced process occurs gradually or spontaneously, it is largely arbitrary and haphazard and can result in indiscriminate connections that may inhibit group collaboration if the broker restricts the flow of resources and information.

D. COMPONENTS

A component is an entity or cohesive subgroup completely separated from other entities or subgroups in the network. The authors' approach to data collection for the USEMB resulted in a sociogram with a single component (i.e., all entities have at least one tie to at least one other entity in the network). However, the removal of the COM, DCM and Administrative Office creates several components (Figure 10). The removal of these key entities results in 15 components (seven are isolated entities arranged at the left of the sociogram in Figure 10), which indicates that the ability of the USEMB to achieve its purpose is vulnerable to the incapacitation of the COM and the DCM. This scenario is especially true to the degree the network must communicate with each component to disseminate resources and information to achieve its purpose.

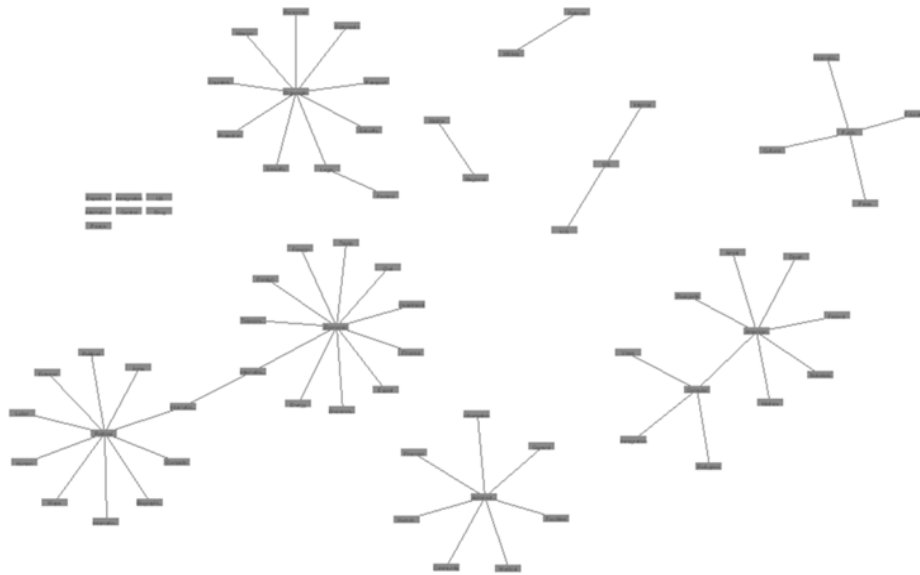


Figure 10. USEMB sociogram (COM, DCM and Administrative Office removed)

E. CLUSTERS

The previous analysis of internal boundaries identifiable in the USEMB sociogram (Figure 9), compared with the sociogram with the COM, DCM, and Administrative Office removed (Figure 10) indicates the presence of several clusters. The presence of these clusters indicates the need for further analysis to determine the reasons why they are occurring. The clusters appear as small hub-and-spoke sub-networks in which the hub is typically the member of the USEMB country team. Speculation suggests that the clustering present within the USEMB is the result of a confluence of bureaucratic and psychological factors.

For example, clustering in social networks occurs for a variety of intended and unintended reasons such as induction, homophily, or confounding influences (Christakis, 2010). Induction is the intentional act or process of placing someone into a group (Merriam-Webster, 2013). Homophily describes a love of the same to explain the tendency of individuals to connect with others who share similar attributes or ascribe to the same core beliefs (Retica, 2006). Finally, in some instances, neither induction nor homophily adequately explain clustering. In these cases, clustering is the result of some otherwise unidentifiable or unexplainable (i.e., confounding) outside factor. Clustering in

the USEMB represents an opportunity for increased communication, coordination, and collaboration to improve the ability of the network to achieve its purpose.

F. DENSITY

Density refers to the “tightness of the weave” of the network (Roberts, 2013). It is the relationship between the actual number of connections between nodes compared to the total number of possible connections, where the number of total possible connections is equal to half the product of the total number of nodes and one less than the total number of nodes. Therefore, the country team density equals 170 (i.e., the actual number of connections) divided by 2,775 (i.e., the number of total possible connections).

$$USEMB\ Network\ Density = \frac{170}{\frac{75 * 74}{2}} = \frac{170}{2775} = .0612 = 6.12\%$$

This simple calculation indicates that the USEMB has a very low density and that relatively low likelihood occurs that any single entity will voluntarily collaborate with other entities.

Network density has an effect on the likelihood that individual actors will collaborate with other actors (Scholz et al., 2008, p. 395). For example, in two networks with the same degree centrality, a highly dense network is less dependent on any one actor for information than a network defined by high centrality (see Figure 11).

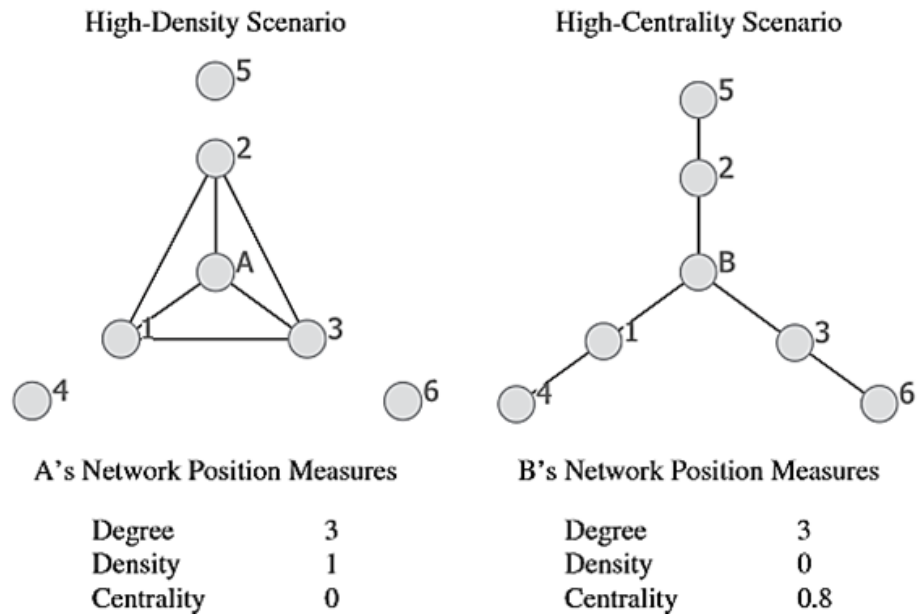


Figure 11. Comparison of a dense (A) and centralized network (B) (from Scholz et al., 2008)

Scholz et al. (2008) demonstrated that “dense relationships reduce enforcement costs and associated credibility problems, so actors with greater density of relationships are more likely to be involved in collaboration” (p. 396). Note that the dense network (A) has no connection with nodes 4, 5 and 6, while the centralized network connects these nodes to the core. As such, although the loose network (B) is fragile and experiences higher relative transaction costs due to low actor familiarity with each other, it has access to more, potentially useful, information (Scholz et al., 2008, p. 396). Existing dense networks require little, if any, external intervention to increase collaboration, but have limited access to information. Conversely, existing loose networks have access to more information, but are comparatively fragile. Therefore, both existing dense networks and loose networks can benefit from additional bridging connections.

Although the structure of a network determines opportunities and constraints, a network’s structure is not within the control of any individual (Balkundi & Kilduff, 2006, p. 422). However, in a network with substantial structural holes, the deliberate introduction of brokers can change network dynamics and structure. For example, entities seeking to collaborate must intentionally establish ties to span the gaps that exist between

groups. In turn, these ties can increase intra-organizational trust and improve the resiliency of collaborative networks. Furthermore, intentional brokerage can bypass barriers to collaboration and unite disconnected subgroups. However, it is important to understand that effective brokers require knowledge of the network as a whole, along with sufficient skills and talent to connect, and maintain connections with disconnected sub-groups.

G. CENTRALITY

The use of social network analysis centrality measures to analyze the embassy network is a convenient method of identifying who is central to the network. Centrality measures provide an approximate measure of an actor's social capital based on the actor's position within a network, and provide valuable insight regarding the relative importance of entities (Everton, 2012, p. 398). Although there are more than twenty algorithms to calculate centrality, the four broad categories of centrality are degree, closeness, betweenness and eigenvector (p. 207). Each measure describes specific qualities of an actor's relationships within a network. Using a single centrality measure can lead to false conclusions regarding network centrality. An isolated centrality analysis does not clearly reveal the strength of social ties within the network, which requires an aggregation of centrality measures in combination with an analysis of the network structure. This multi-modal approach assists in characterizing a network's topology.

Degree centrality measures an actor's exposure to the network by counting the number of ties the actor has with other entities. High degree centrality indicates that an actor is correspondingly active within the network and has significant opportunity to communicate with other actors. A degree centrality analysis (Figure 12) indicates that the COM, DCM, Administrative Office and Military Group are the most active members of the USEMB country team and communicate with the most organizational entities.

Administrative Office (DoS)	25	1	Administrative Office (DoS)	23	1
Military Group	19	0.75	Military Group	19	0.818
Chief of Mission (Ambassa...	18	0.708	Economic Office (DoS)	12	0.5
Deputy Chief of Mission	18	0.708	Diplomatic Security Office ...	11	0.455
Economic Office (DoS)	14	0.542	Political Office (DoS)	11	0.455
Diplomatic Security Office ...	13	0.5	American Citizen Services	7	0.273
Political Office (DoS)	13	0.5	Regional Security Office (...)	7	0.273
Regional Security Office (...)	9	0.333	Consular Affairs Office (Do...	5	0.182
Consular Affairs Office (Do...	9	0.333	Public Diplomacy Office (D...	5	0.182
Public Diplomacy Office (D...	7	0.25	Security Investigations	4	0.136
American Citizen Services	7	0.25	Federal Bureau of Investig...	4	0.136
Federal Bureau of Investig...	6	0.208	US Department of the Tre...	4	0.136
US Department of the Tre...	6	0.208	Immigration and Customs ...	4	0.136
Immigration and Customs ...	6	0.208	Personnel Investigations	3	0.091
Department of Justice (DoJ)	4	0.125	Mission Security Upgrades	3	0.091
Security Investigations	4	0.125	Cultural Information	3	0.091
Central Intelligence Agenc...	4	0.125	Department of Justice (DoJ)	2	0.045
Defense Attache (DATT) ...	4	0.125	Security Training	2	0.045
Drug Enforcement Agency...	4	0.125	Protection of People, Facili...	2	0.045
US Agency for Internation...	3	0.083	Passport & Visa Fraud Inv...	2	0.045
Geographic Combatant Co...	3	0.083	Counterterrorism Section	2	0.045
Peace Corps Section	3	0.083	Arms Control Issues	2	0.045
Personnel Investigations	3	0.083	General Services Section	2	0.045
Mission Security Upgrades	3	0.083	Marine Security Detachment	2	0.045
Cultural Information	3	0.083	Human Resources Section	2	0.045

Figure 12. Degree centrality including COM/DCM (left) and excluding COM/DCM (right)

Closeness centrality calculates how close (on average) each actor is to the other actors in a network. High closeness centrality corresponds with an actor's ability to disseminate information throughout the network rapidly (Cunningham, 2013). A closeness centrality analysis in Palantir (Figure 13) indicates the apparent value of the relationships the Administrative Office and Military Group in rapidly diffusing information within the USEMB.

Administrative Office (DoS)	0.569	1	Administrative Office (DoS)	0.562	1
Chief of Mission (Ambassa...	0.54	0.913	Military Group	0.444	0.642
Deputy Chief of Mission	0.54	0.913	Diplomatic Security Office ...	0.419	0.563
Military Group	0.446	0.63	Economic Office (DoS)	0.409	0.534
Diplomatic Security Office ...	0.425	0.588	Political Office (DoS)	0.404	0.52
Economic Office (DoS)	0.418	0.547	Consular Affairs Office (Do...	0.402	0.514
Political Office (DoS)	0.413	0.533	Regional Security Office (...)	0.398	0.5
Consular Affairs Office (Do...	0.411	0.526	Federal Bureau of Investig...	0.391	0.48
Regional Security Office (...)	0.404	0.506	Immigration and Customs ...	0.391	0.48
Federal Bureau of Investig...	0.398	0.486	US Department of the Tre...	0.389	0.474
Immigration and Customs ...	0.398	0.486	General Services Section	0.383	0.455
US Department of the Tre...	0.398	0.48	Central Intelligence Agenc...	0.383	0.455
Public Diplomacy Office (D...	0.389	0.461	Defense Attache (DATT) ...	0.383	0.455
Central Intelligence Agenc...	0.389	0.461	Drug Enforcement Agency...	0.383	0.455
Defense Attache (DATT) ...	0.389	0.461	Public Diplomacy Office (D...	0.381	0.449
Drug Enforcement Agency...	0.389	0.461	Department of Justice (DoJ)	0.365	0.402
General Services Section	0.385	0.449	Human Resources Section	0.365	0.402
Geographic Combatant Co...	0.376	0.42	US Agency for Internation...	0.362	0.391
Department of Justice (DoJ)	0.374	0.414	Information Management ...	0.362	0.391
US Agency for Internation...	0.37	0.403	Financial Management Se...	0.362	0.391
Peace Corps Section	0.37	0.403	Facilities Maintenance Sec...	0.362	0.391
Human Resources Section	0.368	0.397	Community Liason Section	0.362	0.391
Information Management ...	0.365	0.386	Peace Corps Section	0.362	0.391
Financial Management Se...	0.365	0.386	Medical Services Section	0.362	0.391
Facilities Maintenance Sec...	0.365	0.386	Arms Control Issues	0.336	0.314

Figure 13. Closeness centrality including COM/DCM (left) and excluding COM/DCM (right)

Betweenness centrality gauges the extent to which each actor lies on the shortest path between all other actors in a network. High betweenness centrality relates to an actor's potential to act as an intermediary or broker (Cunningham, 2013). A betweenness

centrality analysis in Palantir (Figure 14) indicates the high brokerage potential of the country team. The entities with the highest brokerage potential are all members of the country team likely due to intentional network design to establish the members of the country team in positions to control the flow of resources within the USEMB.

Administrative Office (DoS)	1,038.854	1	Administrative Office (DoS)	1,949.037	1
Economic Office (DoS)	737	0.709	Economic Office (DoS)	715	0.367
Consular Affairs Office (DoS)	664	0.639	Consular Affairs Office (DoS)	644	0.33
Political Office (DoS)	598	0.576	Political Office (DoS)	564	0.289
Chief of Mission (Ambassador)	491.998	0.474	Military Group	487.387	0.25
Deputy Chief of Mission	491.998	0.474	American Citizen Services	411	0.211
American Citizen Services	423	0.407	Diplomatic Security Office	288.929	0.148
Military Group	338.109	0.325	Public Diplomacy Office	198.25	0.102
Diplomatic Security Office	321.786	0.31	Regional Security Office	116.221	0.06
Public Diplomacy Office	234.5	0.226	US Department of the Treasury	90.5	0.046
Regional Security Office	135.753	0.131	Cultural Information	77.5	0.04
US Department of the Treasury	104.2	0.1	Federal Bureau of Investigation	46.858	0.024
Cultural Information	77	0.074	Immigration and Customs	46.858	0.024
Federal Bureau of Investigation	48.54	0.047	Arms Control Issues	21.75	0.011
Immigration and Customs	48.54	0.047	Political-Military Issues	21.75	0.011
Arms Control Issues	13.5	0.013	Human Resources Section	16.069	0.008
Political-Military Issues	13.5	0.013	Department of Justice (DoJ)	11.898	0.006
Department of Justice (DoJ)	12.933	0.012	International Organizations	11	0.006
International Organizations	11	0.011	International Organizations	10	0.005
International Organizations	10	0.01	Security Investigations	7.274	0.004
Human Resources Section	8.348	0.008	Press Relations	6.5	0.003
Personnel Investigations	4.836	0.005	Personnel Investigations	5.041	0.003
Security Investigations	4.023	0.004	Mission Security Upgrades	1.348	0.001
Press Relations	4	0.004	Passport & Visa Fraud Investigations	1.077	0.001
Mission Security Upgrades	0.939	0.001	Legal Attache	1.077	0.001

Figure 14. Betweenness centrality including COM/DCM (left) and excluding COM/DCM (right)

Eigenvector centrality is similar to degree centrality in that it counts the number of ties an actor has with other entities. It is in essence “borrowed” centrality (Balkundi & Kilduff, 2006, p. 433). However, unlike degree centrality, it weights links to centralized actors higher than peripheral ties. Eigenvector centrality assumes that direct ties to highly centralized actors are more influential than the same ties to peripheral actors (Cunningham, 2013). A high eigenvector centrality indicates that an actor has ties to more influential entities within the network. Disregarding the obvious eigenvector centrality of a COM in direct communication with the President of the United States and the host nation’s head of state, an eigenvector centrality analysis in Palantir (Figure 15) indicates that the Administrative Office and Military Group have the most influential connections. In other words, support of the Administrative Office and the Military Group improves the likelihood of initiatives to succeed within the USEMB.

Administrative Office (DoS)	0.093	1	Administrative Office (DoS)	0.115	1
Military Group	0.07	0.75	Military Group	0.095	0.819
Chief of Mission (Ambassa...	0.067	0.708	Economic Office (DoS)	0.06	0.5
Deputy Chief of Mission	0.067	0.708	Political Office (DoS)	0.055	0.456
Economic Office (DoS)	0.052	0.542	Diplomatic Security Office ...	0.055	0.456
Diplomatic Security Office ...	0.048	0.5	Regional Security Office (...)	0.035	0.274
Political Office (DoS)	0.048	0.5	American Citizen Services	0.034	0.269
Regional Security Office (...)	0.033	0.334	Consular Affairs Office (Do...	0.026	0.188
Consular Affairs Office (Do...	0.026	0.251	Public Diplomacy Office (D...	0.025	0.183
Public Diplomacy Office (D...	0.026	0.25	Federal Bureau of Investig...	0.02	0.137
American Citizen Services	0.026	0.249	Immigration and Customs ...	0.02	0.137
Federal Bureau of Investig...	0.022	0.208	US Department of the Tre...	0.02	0.137
Immigration and Customs ...	0.022	0.208	Security Investigations	0.02	0.137
US Department of the Tre...	0.022	0.208	Cultural Information	0.015	0.091
Department of Justice (DoJ)	0.015	0.125	Mission Security Upgrades	0.015	0.091
Central Intelligence Agenc...	0.015	0.125	Personnel Investigations	0.015	0.091
Defense Attache (DATT) ...	0.015	0.125	International Organizations	0.01	0.046
Drug Enforcement Agency...	0.015	0.125	Department of Justice (DoJ)	0.01	0.046
Security Investigations	0.015	0.125	Human Resources Section	0.01	0.046
US Agency for Internation...	0.011	0.083	General Services Section	0.01	0.046
Peace Corps Section	0.011	0.083	Central Intelligence Agenc...	0.01	0.046
Geographic Combatant Co...	0.011	0.083	Defense Attache (DATT) ...	0.01	0.046
Cultural Information	0.011	0.083	Drug Enforcement Agency...	0.01	0.046
Mission Security Upgrades	0.011	0.083	U.S. Secret Service (USSS)	0.01	0.046
Personnel Investigations	0.011	0.083	Press Relations	0.01	0.046

Figure 15. Eigenvector centrality including COM/DCM (left) and excluding COM/DCM (right)

Centrality analysis indicates that a high degree of centralization exists in the USEMB with the COM and DCM. This centralization is characteristic of an organization with one clear authority and an established hierarchical chain-of-command. In the absence of the COM, the DCM acts as the central authority. Informal ties may increase the influence of other entities (e.g., the Administrative Office and Military Group), but COM authority supersedes their influence for the network as a whole. Thus, if the COM does not support, actively or passively, the organization sponsoring innovation within the USEMB, that initiative is unlikely to succeed. In many embassies, the COM delegates authority for day-to-day activities of the mission and certain diplomatic activities to the DCM. Consequently, the DCM often shares the centrality of the COM.

H. NETWORK OPENNESS

The USEMB is open in the sense that it actively seeks to interact with entities outside of the network. On the other hand, it is a closed network in the sense that only carefully vetted organizations can participate. A cursory consideration of the USEMB's openness indicates that it is open to outside input, information, and resources that assist the network in achieving its purpose. Numerous connections to entities and organizations outside the official structure of the embassy assist the USEMB in achieving its purpose. Additionally, network members seek additional relationships with entities external to the network to establish new sources of information, resources, and influence. Several clusters within the USEMB (e.g., Public Affairs, Peace Corps and Regional Security

Office) routinely disseminate or obtain information from outside the formal authority ties of the USEMB.

I. NETWORK DESIGN FACTORS

Network design factors represent a balance of formality and informality. This balance comes from the location of network elements on the spectrums between anarchic networks and organized networks, unbounded and bounded membership, heterarchy and hierarchy, and shared and centralized governance. Based on our subjective assessment, the USEMB occupies the formal side of the network design continuum (Figure 16).

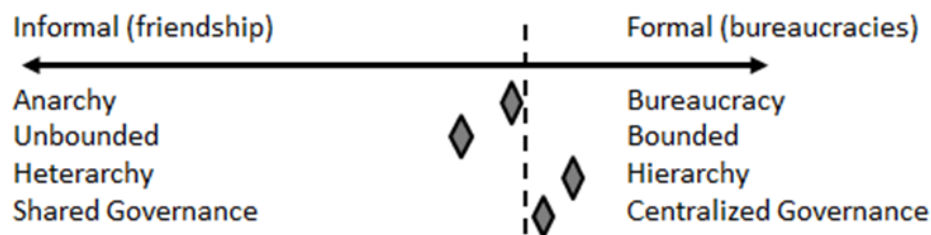


Figure 16. USEMB location on the network design continuum

Knowledge of the USEMB design factors is important in determining the level of tension in a network. Tension occurs when the force exerted by one end of this continuum conflicts with the forces exerted at the other end of the continuum. Every network must balance design tensions. Emphasizing one element (e.g., heterarchy) comes at the cost of another (e.g., efficiency). The influence of design tensions on a network depends on how well the network achieves its purpose. If the network achieves its purpose, and the network tensions are in equilibrium, then the network will continue to function well. However, if either factor changes, either the network will fail to achieve its purpose or it will not sustain action over time. Widely dispersed locations of certain network elements on the design continuum would indicate a design mismatch. Such a mismatch would require intervention to bring the elements into congruence. Effective and enduring networks find a balance between design tensions that facilitates achievement of the network's purpose.

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